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**FINAL CONFORMITY ANALYSIS  
FOR THE 2019 FEDERAL TRANSPORTATION IMPROVEMENT  
PROGRAM AND 2018 REGIONAL TRANSPORTATION PLAN**

SEPTEMBER 19, 2018

MADERA COUNTY TRANSPORTATION COMMISSION

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## **EXECUTIVE SUMMARY**

This report presents the Conformity Analysis for the 2019 Federal Transportation Improvement Program (2019 FTIP) and 2018 Regional Transportation Plan (2018 RTP). The Madera County Transportation Commission (MCTC) is the designated Metropolitan Planning Organization (MPO) in Madera County, California, and is responsible for regional transportation planning.

The Clean Air Act Section 176(c) (42 U.S.C. 7506(c)) and U.S. Environmental Protection Agency (EPA) transportation conformity regulations (40 CFR 93 Subpart A) require that each new RTP and TIP be demonstrated to conform to the State Implementation Plan (SIP) before the RTP and TIP are approved by the MPO or accepted by the U.S. Department of Transportation (DOT). This analysis demonstrates that the criteria specified in the transportation conformity regulations for a conformity determination are satisfied by the 2019 FTIP and the 2018 RTP; a finding of conformity is therefore supported. The 2019 FTIP, 2018 RTP and the corresponding conformity analysis were approved by the MCTC Policy Board on August 22, 2018. Federal approval is anticipated on or before December 31, 2018. FHWA/FTA last issued a finding of conformity for the 2017 FTIP and the 2014 RTP as amended if applicable, on January 10, 2018.

The 2019 FTIP and the 2018 RTP have been financially constrained in accordance with the requirements of 40 CFR 93.108 and consistent with the U.S. DOT metropolitan planning regulations (23 CFR Part 450). A discussion of financial constraint and funding sources is included in the appropriate documents.

The applicable Federal criteria or requirements for conformity determinations, the conformity tests applied, the results of the conformity assessment, and an overview of the organization of this report are summarized below.

### **CONFORMITY REQUIREMENTS**

The Federal transportation conformity regulations (40 Code of Federal Regulations Parts 51 and 93) specify criteria and procedures for conformity determinations for transportation plans, programs, and projects and their respective amendments. The Federal transportation conformity regulation was first promulgated in 1993 by the U.S. EPA, following the passage of amendments to the Federal Clean Air Act in 1990. The Federal transportation conformity regulation has been revised several times since its initial release to reflect both EPA rule changes and court opinions. The transportation conformity regulation is summarized in Chapter 1.

The conformity regulation applies nationwide to “all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan” (40 CFR 93.102). Currently, the San Joaquin Valley (or portions thereof) is designated as nonattainment with respect to Federal air quality standards for ozone, and particulate matter under 2.5 microns in diameter (PM<sub>2.5</sub>); and has a maintenance plan for particulate matter under 10 microns in diameter (PM-10). Therefore, transportation plans and

programs for the nonattainment areas for Madera County area must satisfy the requirements of the Federal transportation conformity regulation. Note that the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties have attained the CO standard and maintained attainment for 20 years. In accordance with Section 93.102(b)(4), conformity requirements for the CO standard stop applying 20 years after EPA approves an attainment redesignation request or as of June 1, 2018. Therefore, the conformity analysis for the 2019 FTIP and 2018 RTP no longer includes a CO conformity demonstration.

Under the transportation conformity regulation, the principal criteria for a determination of conformity for transportation plans and programs are:

- (1) the TIP and RTP must pass an emissions budget test using a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test;
- (2) the latest planning assumptions and emission models specified for use in conformity determinations must be employed;
- (3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and
- (4) interagency and public consultation.

On-going interagency consultation is conducted through the San Joaquin Valley Interagency Consultation Group to ensure Valley-wide coordination, communication and compliance with Federal and California Clean Air Act requirements. Each of the eight Valley MPOs and the San Joaquin Valley Unified Air Pollution Control District (Air District) are represented. The Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the U.S. EPA, the California Air Resources Board (CARB) and Caltrans are also represented on the committee. The final determination of conformity for the TIP and RTP is the responsibility of FHWA, and FTA within the U.S. DOT.

FHWA has developed a Conformity Checklist (included in Appendix A) that contains the required items to complete a conformity determination. Appropriate references to these items are noted on the checklist.

## **CONFORMITY TESTS**

The conformity tests specified in the Federal transportation conformity regulation are: (1) the emissions budget test, and (2) the interim emission test. For the emissions budget test, predicted emissions for the TIP/RTP must be less than or equal to the motor vehicle emissions budget specified in the approved air quality implementation plan or the emissions budget found to be adequate for transportation conformity purposes. If there is no approved air quality plan for a pollutant for which the region is in nonattainment or no emission budget has been found to be adequate for transportation conformity purposes, the interim emission test applies. Chapter 1 summarizes the applicable air quality implementation plans and conformity tests for ozone, PM-10, and PM2.5.

## RESULTS OF THE CONFORMITY ANALYSIS

A regional emissions analysis was conducted for the years 2018, 2019, 2020, 2021, 2023, 2024, 2027, 2030, 2031, 2035, 2037 and 2042 for each applicable pollutant. All analyses were conducted using the latest planning assumptions and emissions models. The major conclusions of the MCTC Conformity Analysis are:

- For 1997 8-hour ozone<sup>1</sup>, the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2019 FTIP and the 2018 RTP for all years tested are projected to be less than the approved emissions budgets specified in the *2007 Ozone Plan (as revised in 2015)*. The conformity tests for ozone are therefore satisfied.
- For 2008 8-hour ozone, the total regional on-road vehicle-related emissions (ROG and NOx) associated with implementation of the 2019 FTIP and the 2018 RTP for all years tested are projected to be less than the adequate emissions budgets specified in the *2016 Ozone Plan*. The conformity tests for ozone are therefore satisfied.
- For PM-10, the total regional vehicle-related emissions (PM-10 and NOx) associated with implementation of the 2019 FTIP and the 2018 RTP for all years tested are either (1) projected to be less than the approved emissions budgets, or (2) less than the emission budgets using the approved PM-10 and NOx trading mechanism for transportation conformity purposes from the *2007 PM-10 Maintenance Plan (as revised in 2015)*. The conformity tests for PM-10 are therefore satisfied.
- For the 1997 annual and 24-hour and 2012 annual PM2.5 standards, the total regional on-road vehicle-related emissions associated with implementation of the 2019 FTIP and the 2018 RTP for the analysis years are either (1) projected to be less than the approved emission budgets, or (2) less than the emission budgets using the approved PM2.5 and NOx trading mechanism for transportation conformity purposes from the *2008 PM2.5 Plan (as revised in 2011)*. The conformity tests for PM2.5 for the 1997 and 2012 standards are therefore satisfied.
- For the 2006 24-hour PM2.5 standard, the total regional on-road vehicle-related emissions associated with implementation of the 2019 FTIP and the 2018 RTP for the analysis years are either (1) projected to be less than the approved emission budgets, or (2) less than the emission budgets using the approved PM2.5 and NOx trading mechanism for transportation conformity purposes from the *2012 PM2.5 Plan (as revised in 2015)*. The conformity tests for PM2.5 for the 2006 standard are therefore satisfied.

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<sup>1</sup> Note that FHWA/FTA *Interim Guidance on Conformity Requirements for the 1997 Ozone NAAQS* issued on April 23 does not require that areas in non-attainment of the 2008 Ozone Standard address 1997 ozone in their regional conformity analyses at this time. However, the SJV MPOs have voluntarily included 1997 ozone conformity demonstration for the 2018 RTP/2019 TIP to minimize project delivery risk.

- The 2019 FTIP and the 2018 RTP will not impede and will support timely implementation of the TCMs that have been adopted as part of applicable air quality implementation plans. The current status of TCM implementation is documented in Chapter 4 of this report. Since the local SJV procedures (e.g., Air District Rule 9120 Transportation Conformity) have not been approved by EPA, consultation has been conducted in accordance with Federal requirements.

## **REPORT ORGANIZATION**

The report is organized into six chapters. Chapter 1 provides an overview of the applicable Federal and State conformity regulations and requirements, air quality implementation plans, and conformity test requirements. Chapter 2 contains a discussion of the latest planning assumptions and transportation modeling. Chapter 3 describes the air quality modeling used to estimate emission factors and mobile source emissions. Chapter 4 contains the documentation required under the Federal transportation conformity regulation for transportation control measures. Chapter 5 provides an overview of the interagency requirements and the general approach to compliance used by the San Joaquin Valley MPOs. The results of the conformity analysis for the TIP/RTP are provided in Chapter 6.

Appendix E includes public hearing documentation conducted on the 2019 FTIP, 2018 RTP and corresponding conformity analysis on August 16, 2018. Comments received on the conformity analysis and responses made as part of the public involvement process are included in Appendix F.



## **CHAPTER 1: FEDERAL AND STATE REGULATORY REQUIREMENTS**

The criteria for determining conformity of transportation programs and plans under the Federal transportation conformity regulation (40 CFR Parts 51 and 93) and the applicable conformity tests for the San Joaquin Valley nonattainment areas are summarized in this section. The Conformity Analyses for the 2019 FTIP and 2018 RTP were prepared based on these criteria and tests. Presented first is a review of the development of the applicable conformity regulation and guidance procedures, followed by summaries of conformity regulation requirements, air quality designation status, conformity test requirements, and analysis years for the Conformity Analysis.

The MCTC is the designated Metropolitan Planning Organization (MPO) for Madera County in the San Joaquin Valley. As a result of this designation MCTC prepares the TIP, RTP, and associated conformity analyses. The TIP serves as a detailed four year (FY 2018/19 – 2021/22) programming document for the preservation, expansion, and management of the transportation system. The 2018 RTP has a 2042 horizon that provides the long term direction for the continued implementation of the freeway/expressway plan, as well as improvements to arterial streets, transit, and travel demand management programs. The TIP and RTP include capacity enhancements to the freeway/expressway system commensurate with available funding.

### **A. FEDERAL AND STATE CONFORMITY REGULATIONS**

#### **CLEAN AIR ACT AMENDMENTS**

Section 176(c) of the Clean Air Act (CAA, 1990) requires that Federal agencies and MPOs not approve any transportation plan, program, or project that does not conform to the approved State Implementation Plan (SIP). The 1990 amendments to the Clean Air Act expanded Section 176(c) to more explicitly define conformity to an implementation plan to mean:

“Conformity to the plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and that such activities will not (i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.”

Section 176(c) also provides conditions for the approval of transportation plans, programs, and projects, and requirements that the Environmental Protection Agency (EPA) promulgate conformity determination criteria and procedures no later than November 15, 1991.

## FEDERAL RULE

The initial November 15, 1991 deadline for conformity criteria and procedures was partially completed through the issuance of supplemental interim conformity guidance issued on June 7, 1991 for carbon monoxide, ozone, and particulate matter ten microns or less in diameter (PM-10). EPA subsequently promulgated the Conformity Final Rule in the November 24, 1993 *Federal Register* (EPA, 1993). The 1993 Rule became effective on December 27, 1993. The Federal Transportation Conformity Final Rule has been amended several times from 1993 to present. These amendments have addressed a number of items related to conformity lapses, grace periods, and other related issues to streamline the conformity process.

EPA published the Transportation Conformity Rule PM2.5 and PM10 Amendments on March 24, 2010; the rule became effective on April 23, 2010 (EPA, 2010a). This PM amendments final rule amends the conformity regulation to address the 2006 PM2.5 national ambient air quality standard (NAAQS). The final PM amendments rule also addresses hot-spot analyses in PM2.5 and PM10 and carbon monoxide nonattainment and maintenance areas.

On March 14, 2012, EPA published the Transportation Conformity Rule Restructuring Amendments, effective April 13, 2012 (EPA, 2012a). The amendments restructure several sections of the rule so that they apply to any new or revised National Ambient Air Quality Standards. In addition, several clarifications to improve implementation of the rule were finalized.

On March 6, 2015, EPA published *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements* final rule (effective April 6, 2015), which shifted the San Joaquin Valley 2008 Ozone Standard attainment date from December 31, 2032 to July 20, 2032 (EPA, 2015). EPA's March 2015 ozone implementation rule also revoked the 1997 Ozone Standard for transportation conformity purposes. However, on February 16, 2018, the U.S. Court of Appeals ruled against parts of the EPA's 2015 Ozone Implementation Rule related to the revocation of the 1997 ozone standard and the relevant "anti-backsliding" requirements. While EPA has petitioned for a rehearing on April 23, the ultimate outcome and impacts of this lawsuit are currently unknown. Due to this uncertainty, the conformity analysis for the 2018 RTP and 2019 FTIP addresses the 1997 ozone standard.

On July 29, 2016, EPA released its Final Rule titled *Implementing National Ambient Air Quality Standards for Fine Particles: State Implementation Plan Requirements*. According to the implementation rule, areas designated as nonattainment for the 1997 PM2.5 standards, must continue to demonstrate conformity to these standards until attainment (EPA, 2016).

## MULTI-JURISDICTIONAL GUIDANCE

EPA reissued Guidance for Transportation Conformity Implementation in Multi-Jurisdictional Nonattainment and Maintenance Areas in July 2012 (EPA, 2012c). This guidance updates and supersedes the July 2004 "multi-jurisdictional" guidance (EPA, 2004a), but does not change the substance of the guidance on how nonattainment areas with multiple agencies should conduct

conformity determinations. This guidance applies to the San Joaquin Valley since there are multiple MPOs within a single nonattainment area. The main principle of the guidance is that one regional emissions analysis is required for the entire nonattainment area. However, separate modeling and conformity documents may be developed by each MPO.

Part 3 of the guidance applies to nonattainment areas that have adequate or approved conformity budgets addressing a particular air quality standard. This Part currently applies to the San Joaquin Valley for ozone and PM-10. The guidance allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and the Department of Transportation (DOT) conformity determination.

With respect to PM<sub>2.5</sub>, the Transportation Conformity Rule PM<sub>2.5</sub> and PM<sub>10</sub> Amendments published on March 24, 2010 effectively incorporates the “multi-jurisdictional” guidance directly into the rule. The Rule allows MPOs to make independent conformity determinations for their plans and TIPs as long as all of the other subareas in the nonattainment area have conforming transportation plans and TIPs in place at the time of each MPO and DOT conformity determination.

## **DISTRICT RULE**

The San Joaquin Valley Unified Air Pollution Control District (Air District) adopted Rule 9120 Transportation Conformity on January 19, 1995 in response to requirements in Section 176(c)(4)(c) of the 1990 Clean Air Act Amendments. In May 2015, the San Joaquin Valley Unified Air Pollution Control District requested ARB to withdraw Rule 9120 from California State Implementation Plan consideration.

In July of 2015, ARB sent a letter to EPA withdrawing Rule 9120 from the California State Implementation Plan. Therefore EPA can no longer act on the Rule. It should also be noted that EPA has changed 40 CFR 51.390 to streamline the requirements for State conformity SIPs. Since a transportation conformity SIP cannot be approved for the San Joaquin Valley, the Federal transportation conformity rule governs.

## **B. CONFORMITY REGULATION REQUIREMENTS**

The Federal regulations identify general criteria and procedures that apply to all transportation conformity determinations, regardless of pollutant and implementation plan status. These include:

- 1) *Conformity Tests* — Sections 93.118 and 93.119 specify emissions tests (budget and interim emissions) that the TIP/RTP must satisfy in order for a determination of conformity to be found. The final transportation conformity regulation issued on July 1, 2004 requires a submitted SIP motor vehicle emissions budget to be found adequate or approved by EPA prior to use for making conformity determinations. The budget must be used on or after the effective date of EPA’s adequacy finding or approval.

## 2) *Methods / Modeling:*

*Latest Planning Assumptions* — Section 93.110 specifies that conformity determinations must be based upon the most recent planning assumptions in force at the time the conformity analysis begins. This is defined as “the point at which the MPO begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions. New data that becomes available after an analysis begins is required to be used in the conformity determination only if a significant delay in the analysis has occurred, as determined through interagency consultation” (EPA, 2010b). All analyses for the Conformity Analysis were conducted using the latest planning assumptions and emissions models in force at the time the conformity analysis started in December 2017 (see Chapter 2).

*Latest Emissions Models* — Section 93.111 requires that the latest emission estimation models specified for use in SIPs must be used for the conformity analysis. EMFAC2014 was used in the Conformity Analysis and is documented in Chapter 3. EPA issued a federal register notice on December 14, 2015 formally approving EMFAC2014 for use in conformity determinations.

- 3) *Timely Implementation of TCMs* — Section 93.113 provides a detailed description of the steps necessary to demonstrate that the new TIP/RTP are providing for the timely implementation of TCMs, as well as demonstrate that the plan and/or program is not interfering with this implementation. TCM documentation is included in Chapter 4 of the Conformity Analysis.
- 4) *Consultation* — Section 93.105 requires that the conformity determination be made in accordance with the consultation procedures outlined in the Federal regulations. These include:
  - MPOs are required to provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, the USDOT and EPA (Section 93.105(a)(1)).
  - MPOs are required to establish a proactive public involvement process, which provides opportunity for public review and comment prior to taking formal action on a conformity determination (Section 93.105(e)).

The TIP, RTP, and corresponding conformity determinations are prepared by each MPO. Copies of the Draft documents are provided to member agencies and others, including FHWA, Federal Transit Administration (FTA), EPA, Caltrans, CARB, and the Air District for review. Both the TIP and RTP are required to be publicly available and an opportunity for public review and comment is provided. MCTC’s adopted consultation process and policy for conformity analysis includes a 30-day comment period and a public hearing.

## **C. AIR QUALITY DESIGNATIONS APPLICABLE TO THE SAN JOAQUIN VALLEY**

The conformity regulation (section 93.102) requires documentation of the applicable pollutants and precursors for which EPA has designated the area nonattainment or maintenance. In addition, the nonattainment or maintenance area and its boundaries should be described.

MCTC is located in the federally designated San Joaquin Valley Air Basin. The borders of the basin are defined by mountain and foothill ranges to the east and west. The northern border is consistent with the county line between San Joaquin and Sacramento Counties. The southern border is less defined, but is roughly bounded by the Tehachapi Mountains and, to some extent, the Sierra Nevada range. The conformity analysis for the 2019 FTIP and 2018 RTP includes analyses of existing and future air quality impacts for each applicable pollutant.

The San Joaquin Valley is currently designated as nonattainment for the National Ambient Air Quality Standard (NAAQS) for 8-hour ozone (1997 and 2008 standards), and particulate matter under 2.5 microns in diameter (PM<sub>2.5</sub>) (1997, 2006 and 2012 standards); and has a maintenance plan for particulate matter under 10 microns in diameter (PM<sub>10</sub>). Note that the urbanized/metropolitan areas of Kern, Fresno, Stanislaus and San Joaquin Counties have attained the CO standard and maintained attainment for 20 years. In accordance with Section 93.102(b)(4), conformity requirements for the CO standard stop applying 20 years after EPA approves an attainment redesignation request or as of June 1, 2018. Therefore, the conformity analysis for the 2019 FTIP and 2018 RTP no longer includes a CO conformity demonstration.

State Implementation Plans have been prepared to address ozone, PM<sub>10</sub> and PM<sub>2.5</sub>:

- The 2007 Ozone Plan (1997 Standard), as revised in 2015, was approved by EPA on July 8, 2016 (effective September 30, 2016).
- The 2016 Ozone Plan (2008 standard) was adopted by the Air District on June 16, 2016 and subsequently adopted by ARB on July 21, 2016. EPA found the new ozone budgets adequate on June 29, 2017 (effective July 14, 2017).
- The 2007 PM<sub>10</sub> Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016).
- The 2008 PM<sub>2.5</sub> Plan (1997 Standard), as revised in 2011, was approved by EPA on November 9, 2011 (effective January 9, 2012).
- The 2012 PM<sub>2.5</sub> Plan (as revised in 2015) was approved by EPA on August 16, 2016 (effective September 30, 2016).

EPA's March 2015 final rule implementing the 2008 Ozone Standard also revoked the 1997 Ozone Standard for transportation conformity purposes. This revocation became effective April 6, 2015. However, on February 16, 2018, the U.S. Court of Appeals ruled against parts of the EPA's 2015 Ozone Implementation Rule related to the revocation of the 1997 ozone standard and the relevant "anti-backsliding" requirements. While EPA has petitioned for a rehearing on April 23, the ultimate outcome and impacts of this lawsuit are currently unknown. Due to this uncertainty, the conformity analysis for the 2018 RTP and 2019 FTIP addresses the 1997 ozone standard.

EPA designated the San Joaquin Valley nonattainment area for the 2008 Ozone Standard, effective July 20, 2012. Transportation conformity applies one year after the effective date (July 20, 2013). Federal approval for the eight SJV MPO's 2008 Ozone standard conformity demonstrations was received on July 8, 2013.

On December 22, 2017, EPA released a response to state recommendations outlining draft areas designations for the new 2015 ozone standard of 70 ppb. Final designations were published by EPA in May, 2018. Transportation conformity applies one year after the designations effective date and not until 2019. Accordingly, this conformity analysis does not address the 2015 ozone standard.

On November 13, 2009, EPA published Air Quality Designations for the 2006 24-hour PM<sub>2.5</sub> standard, effective December 14, 2009. Nonattainment areas are required to meet the standard by 2014; transportation conformity began to apply on December 14, 2010. On January 20, 2016 EPA published *Designation of Areas for Air Quality Planning Purposes; California; San Joaquin Valley; Reclassification as Serious Nonattainment for the 2006 PM<sub>2.5</sub> NAAQS* finalizing SJV reclassification to Serious nonattainment effective February 19, 2016. Nonattainment areas are required to meet the standard as expeditiously as practicable, but no later than December 31, 2019. It is important to note that the 2006 24-hour PM<sub>2.5</sub> nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 annual PM<sub>2.5</sub> standard.

EPA's nonattainment area designations for the new 2012 PM<sub>2.5</sub> standards became effective on April 15, 2015. Conformity for a given pollutant and standard applies one year after the effective date (April 15, 2016). It is important to note that the 2012 PM<sub>2.5</sub> standards nonattainment area boundary for the San Joaquin Valley are exactly the same as the nonattainment area boundary for the 1997 annual PM<sub>2.5</sub> standard.

On July 29, 2016, EPA released its *Final Rule for Implementing National Ambient Air Quality Standards for Fine Particles*. According to the implementation rule, areas designated as nonattainment for the 1997 PM 2.5 standards, must continue to demonstrate conformity to these standards until attainment. In the San Joaquin Valley, the 1997 standards (both 24-hour and annual) continue to apply.

#### **D. CONFORMITY TEST REQUIREMENTS**

The conformity (Section 93.109(c)–(k)) rule requires that either a table or text description be provided that details, for each pollutant and precursor, whether the interim emissions tests and/or the budget test apply for conformity. In addition, documentation regarding which emissions budgets have been found adequate by EPA, and which budgets are currently applicable for what analysis years is required.

Specific conformity test requirements established for the San Joaquin Valley nonattainment areas for ozone, and particulate matter are summarized below.

Section 93.124(d) of the 1997 Final Transportation Conformity regulation allows for conformity determinations for sub-regional emission budgets by MPOs if the applicable implementation plans (or implementation plan submission) explicitly indicates an intent to create such sub-regional budgets for the purpose of conformity. In addition, Section 93.124(e) of the 1997 rules states: "...if a nonattainment area includes more than one MPO, the implementation plan may establish motor vehicle emission budgets for each MPO, or else the MPOs must collectively make a conformity determination for the entire nonattainment area." Each applicable implementation plan and estimate of baseline emissions in the San Joaquin Valley provides motor vehicle emission budgets by county, to facilitate county-level conformity findings.

## OZONE

### *1997 8-Hour Ozone Standard*

EPA's final rule implementing the 2008 ozone standard also revoked the 1997 ozone standard for transportation conformity purposes. This revocation became effective April 6, 2015. However, on February 16, 2018, the U.S. Court of Appeals ruled against parts of the EPA's 2015 Ozone Implementation Rule related to the revocation of the 1997 ozone standard and the relevant "anti-backsliding" requirements. While EPA has petitioned for a rehearing on April 23, the ultimate outcome and impacts of this lawsuit are currently unknown. Due to this uncertainty, the conformity analysis for the 2018 RTP and 2019 FTIP addresses the 1997 ozone standard<sup>2</sup>.

Under the existing conformity regulation, regional emissions analyses for ozone areas must address nitrogen oxides (NOx) and volatile organic compounds (VOC) precursors. It is important to note that in California, reactive organic gases (ROG) are considered equivalent to and are used in place of volatile organic compounds (VOC).

EPA approved the 2007 Ozone (1997 standard) Plan (as revised in 2015) including conformity budgets on July 8, 2016 (effective September 30, 2016). The revised SIP identified both reactive organic gases (ROG) and nitrogen oxides (NOx) subarea budgets in tons per average summer day for each MPO in the nonattainment area. For 1997 ozone conformity, the SJV MPOs will continue to conduct demonstrations for subarea emissions budgets as established in the 2007 Ozone Plan (as revised in 2015).

The approved conformity budgets from Table 1 of the August 12, 2016 Federal Register are provided in a table below. These budgets will be used to compare to emissions resulting from the 2019 FTIP and the 2018 RTP.

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<sup>2</sup> Note that FHWA/FTA *Interim Guidance on Conformity Requirements for the 1997 Ozone NAAQS* issued on April 23 does not require that areas in non-attainment of the 2008 Ozone Standard address 1997 ozone in their regional conformity analyses at this time. However, the SJV MPOs have voluntarily included 1997 ozone conformity demonstration for the 2018 RTP/2019 TIP to minimize project delivery risk.

**Table 1-1:**  
**On-Road Motor Vehicle 1997 Ozone Standard Budgets <sup>(a)</sup>**  
(summer tons/day)

County	2017 <sup>(b)</sup>		2020		2023	
	ROG	NO <sub>x</sub>	ROG	NO <sub>x</sub>	ROG	NO <sub>x</sub>
Fresno	8.7	29.9	6.8	24.3	5.6	14.6
Kern (SJV)	6.9	26.8	5.7	22.4	4.8	12.9
Kings	1.4	5.5	1.1	4.7	0.9	2.7
Madera	2.0	5.5	1.6	4.5	1.3	2.7
Merced	2.7	10.3	2.1	8.5	1.7	5.1
San Joaquin	6.4	14.1	5.1	11.3	4.3	7.3
Stanislaus	4.1	11.3	3.2	9.2	2.7	5.8
Tulare	4.0	10.3	3.1	8.1	2.5	4.9

<sup>(a)</sup>Note that EPA did not take action on the 2011 and 2014 budgets of the 2007 Ozone Plan (as revised in 2015).

<sup>(b)</sup> 2017 budgets are not in the timeframe of this conformity analysis.

#### *2008 8-Hour Ozone Standard*

Under the existing conformity regulation, regional emissions analyses for ozone areas must address nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) precursors. It is important to note that in California, reactive organic gases (ROG) are considered equivalent to and are used in place of volatile organic compounds (VOC).

Although EPA has not yet issued a full approval of the 2016 Ozone Plan for the 2008 8-hour ozone standard, the agency found the Plan's transportation conformity budgets adequate on June 29, 2017 (effective July 14, 2017). The EPA adequacy notice identified both reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>) subarea budgets in tons per average summer day for each MPO in the nonattainment area. For 2008 ozone conformity, the SJV MPOs will continue to conduct demonstrations for subarea emissions budgets as established in the 2016 Ozone Plan.

The adequate conformity budgets from June 29, 2017 Federal Register are provided in a table below. These budgets will be used to compare to emissions resulting from the 2019 FTIP and the 2018 RTP.



**Table 1-2:**  
**On-Road Motor Vehicle 2008 Ozone Standard Emissions Budgets**  
(summer tons/day)

County	2018		2021		2024		2027		2030		2031	
	ROG	NOx	ROG	NOx	ROG	NOx	ROG	NOx	ROG	NOx	ROG	NOx
Fresno	8.0	27.7	6.4	22.2	5.4	14.1	4.9	13.2	4.5	12.6	4.3	12.5
Kern (SJV)	6.6	25.4	5.5	20.4	4.8	12.6	4.5	11.7	4.2	10.9	4.1	10.8
Kings	1.3	5.1	1.1	4.2	0.9	2.6	0.9	2.5	0.8	2.3	0.8	2.3
Madera	1.9	5.1	1.5	4.1	1.2	2.6	1.1	2.3	0.9	2.0	0.9	2.0
Merced	2.5	9.4	2.0	7.8	1.6	4.8	1.5	4.4	1.3	4.2	1.3	4.1
San Joaquin	5.9	13.0	4.9	10.3	4.2	6.9	3.8	5.2	3.5	5.7	3.3	5.5
Stanislaus	3.8	10.5	3.0	8.3	2.6	5.6	2.3	5.1	2.1	4.7	2.0	4.7
Tulare	3.7	9.5	2.9	7.2	2.4	4.7	2.2	4.1	1.9	3.8	1.9	3.7

<sup>(a)</sup> Note that 2016 ozone budgets were established by rounding up each county's emissions totals to the nearest tenth of a ton.

As noted above, since transportation conformity for the 2015 ozone standard will not apply until 2019, this conformity analysis does not address the 2015 ozone standard.

## PM-10

The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016), which contains motor vehicle emission budgets for PM-10 and NOx, as well as a trading mechanism. Motor vehicle emission budgets are established based on average annual daily emissions. The motor vehicle emissions budget for PM-10 includes regional re-entrained dust from travel on paved roads, vehicular exhaust, travel on unpaved roads, and road construction. The conformity budgets from Table 2 of the August 12, 2016 Federal Register are provided below and will be used to compare emissions for each analysis year.

The PM-10 SIP allows trading from the motor vehicle emissions budget for the PM-10 precursor NOx to the motor vehicle emissions budget for primary PM-10 using a 1.5 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the 2005 budget for PM-10 with a portion of the 2005 budget for NOx, and use these adjusted motor vehicle emissions budgets for PM-10 and NOx to demonstrate transportation conformity with the PM-10 SIP for analysis years after 2005. As noted above, EPA approved the 2007 PM-10 Maintenance Plan (with minor technical corrections to the conformity budgets) on July 8, 2016, which includes continued approval of the trading mechanism.

The trading mechanism will be used only for conformity analyses for analysis years after 2005. To ensure that the trading mechanism does not impact the ability to meet the NOx budget, the

NOx emission reductions available to supplement the PM-10 budget shall only be those remaining after the NOx budget has been met.

**Table 1-3:  
On-Road Motor Vehicle PM-10 Emissions Budgets**  
(tons per average annual day)

County	2020 <sup>(b)</sup>	
	PM-10	NOx
Fresno	7.0	25.4
Kern <sup>(a)</sup>	7.4	23.3
Kings	1.8	4.8
Madera	2.5	4.7
Merced	3.8	8.9
San Joaquin	4.6	11.9
Stanislaus	3.7	9.6
Tulare	3.4	8.4

<sup>(a)</sup> Kern County subarea includes only the portion of Kern County within the San Joaquin Valley Air Basin.

<sup>(b)</sup> Note that EPA did not take action on the 2005 budgets of the 2007 PM10 Maintenance Plan (as revised in 2015). These budgets are not in the timeframe of this conformity analysis.

## PM2.5

EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM2.5 must address all standards in the conformity determination. The San Joaquin Valley currently violates both the 1997 annual and 24-hour and 2012 annual PM2.5 standards and the 2006 24-hour PM2.5 standards; thus the conformity determination includes all corresponding analyses (see discussion under Air Quality Designations Applicable to the San Joaquin Valley above).

The 2017 PM2.5 Plan addressing 1997, 2006 and 2012 PM2.5 standards is anticipated to be submitted to EPA in the summer of 2018. Since no new PM2.5 budgets are available at this time, existing budgets in the approved PM2.5 plans will continue to be used as described below.

### *1997 (24-hour and annual) and 2012 (annual) PM2.5 Standards*

The 2008 PM2.5 Plan for the 1997 PM2.5 standard (as revised in 2011) was approved by EPA on November 9, 2011, which contains motor vehicle emission budgets for PM2.5 and NOx established based on average annual daily emissions, as well as a trading mechanism. The motor vehicle emissions budget for PM2.5 includes directly emitted PM2.5 motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SOx, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes. The conformity budgets from Table 5

of the November 9, 2011 Federal Register are provided in Table 1-4 below and will be used to compare emissions resulting from the 2019 FTIP and the 2018 RTP.

In accordance with Section 93.109(i)(3) of the conformity rule, if a 2012 PM<sub>2.5</sub> nonattainment area has adequate or approved SIP budgets that address the annual 1997 PM<sub>2.5</sub> standards, it must use the budget test until new 2012 PM<sub>2.5</sub> standard budgets are found adequate or approved. The attainment year of 2021 will be modeled. For this Conformity Analysis, the SJV will conduct determinations for subarea emission budgets as established in the 2008 PM<sub>2.5</sub> (1997 Standard) Plan.

In addition, the final PM<sub>2.5</sub> Implementation Rule requires areas designated as nonattainment for the 1997 PM<sub>2.5</sub> standards to continue demonstrate conformity to these standards until attainment. In the San Joaquin Valley, the 1997 standards (both 24-hour and annual) continue to apply.

**Table 1-4:**  
**On-Road Motor Vehicle 1997 (24-hour and annual) and**  
**2012 (annual) PM<sub>2.5</sub> Standard Emissions Budgets**  
(tons per average annual day)

County	2012 <sup>(a)</sup>		2014	
	PM <sub>2.5</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>
Fresno	1.5	35.7	1.1	31.4
Kern (SJV)	1.9	48.9	1.2	43.8
Kings	0.4	10.5	0.3	9.3
Madera	0.4	9.2	0.3	8.1
Merced	0.8	19.7	0.6	17.4
San Joaquin	1.1	24.5	0.9	21.6
Stanislaus	0.7	16.7	0.6	14.6
Tulare	0.7	15.7	0.5	13.8

<sup>(a)</sup> 2012 budgets are not in the timeframe of this conformity analysis.

The 2008 PM<sub>2.5</sub> SIP includes a trading mechanism that allows trading from the motor vehicle emissions budget for the PM-2.5 precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-2.5 using a 9 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the applicable budget for PM-2.5 with a portion of the applicable corresponding budget for NO<sub>x</sub>, and use these adjusted motor vehicle emissions budgets for PM-2.5 and NO<sub>x</sub> to demonstrate transportation conformity with the PM-2.5 SIP for analysis years after 2014. As noted above, EPA approved the 2008 PM<sub>2.5</sub> Plan (as revised in 2011) on November 9, 2011, which includes approval of the trading mechanism.

The trading mechanism will be used only for conformity analyses for analysis years after 2014. To ensure that the trading mechanism does not impact the ability to meet the NO<sub>x</sub> budget, the

NO<sub>x</sub> emission reductions available to supplement the PM<sub>2.5</sub> budget shall only be those remaining after the NO<sub>x</sub> budget has been met.

As noted above, in accordance with the EPA Transportation Conformity Rule Restructuring Amendments Nonattainment areas allows 2012 PM<sub>2.5</sub> areas with adequate or approved 1997 PM<sub>2.5</sub> budgets to determine conformity for both NAAQS at the same time, using the budget test.

#### *2006 24-Hour PM<sub>2.5</sub> Standard*

The 2012 (2006 Standard) PM<sub>2.5</sub> Plan was first approved by ARB on January 24, 2013 and the Plan Supplement requesting reclassification to Serious and including revised budgets was approved by ARB on October 24, 2014. EPA proposed approval of the plan on January 13, 2015.

On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM<sub>2.5</sub> Standard. On May 18, 2016 EPA published proposed approval of the revised 2012 Plan PM<sub>2.5</sub> budgets. Then on August 16, 2016, the 2012 PM<sub>2.5</sub> Plan was approved by EPA including the revised conformity budgets and a trading mechanism (effective September 30, 2016).

The 2012 PM<sub>2.5</sub> Plan for the 2006 PM<sub>2.5</sub> standard (as revised in 2015) contains motor vehicle emission budgets for PM<sub>2.5</sub> and NO<sub>x</sub> established based on average winter daily emissions, as well as a trading mechanism. The motor vehicle emissions budget for PM<sub>2.5</sub> includes directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SO<sub>x</sub>, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes. The conformity budgets from the 2012 PM<sub>2.5</sub> Plan (as revised in 2015) are provided in Table 1-5 below and will be used to compare emissions resulting from the 2019 FTIP and the 2018 RTP.

**Table 1-5:**  
**On-Road Motor Vehicle 2006 24-Hour PM<sub>2.5</sub> Standard Emissions Budgets**  
(tons per average winter day)

County	2017	
	PM <sub>2.5</sub>	NO <sub>x</sub>
Fresno	1.0	32.1
Kern (SJV)	0.8	28.8
Kings	0.2	5.9
Madera	0.2	6.0
Merced	0.3	11.0
San Joaquin	0.6	15.5
Stanislaus	0.4	12.3
Tulare	0.4	11.2

<sup>(a)</sup> Note that EPA did not take action on the 2014 budgets of the 2012 PM<sub>2.5</sub> Plan (as revised in 2015). These budgets are not in the timeframe of this conformity analysis.

The 2012 PM<sub>2.5</sub> SIP includes a trading mechanism that allows trading from the motor vehicle emissions budget for the PM<sub>2.5</sub> precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-2.5 using an 8 to 1 ratio. The trading mechanism allows the agencies responsible for demonstrating transportation conformity in the San Joaquin Valley to supplement the applicable budget for PM-2.5 with a portion of the applicable corresponding budget for NO<sub>x</sub>, and use these adjusted motor vehicle emissions budgets for PM<sub>2.5</sub> and NO<sub>x</sub> to demonstrate transportation conformity with the PM<sub>2.5</sub> SIP for analysis years after 2014. As noted above, EPA approved the 2012 PM<sub>2.5</sub> Plan budgets (as revised in 2015) on August 16, 2016 (effective September 30, 2016) and the trading mechanism.

## **E. ANALYSIS YEARS**

The conformity regulation (Section 93.118[b] and [d]) requires documentation of the years for which consistency with motor vehicle emission budgets must be shown. In addition, any interpolation performed to meet tests for years in which specific analysis is not required need to be documented.

For the selection of the horizon years, the conformity regulation requires: (1) that if the attainment year is in the time span of the transportation plan, it must be modeled; (2) the last year forecast in the transportation plan must be a horizon year; and (3) horizon years may not be more than ten years apart. In addition, the conformity regulation requires that conformity must be demonstrated for each year for which the applicable implementation plan specifically establishes motor vehicle emission budgets.

Section 93.118(b)(2) clarifies that when a maintenance plan has been submitted, conformity must be demonstrated for the last year of the maintenance plan and any other years for which the maintenance plan establishes budgets in the time frame of the transportation plan. Section 93.118(d)(2) indicates that a regional emissions analysis may be performed for any years, the attainment year, and the last year of the plan's forecast. Other years may be determined by interpolating between the years for which the regional emissions analysis is performed.

Section 93.118(d)(2) indicates that the regional emissions analysis may be performed for any years in the time frame of the transportation plan provided they are not more than ten years apart and provided the analysis is performed for the attainment year (if it is in the time frame of the transportation plan) and the last year of the plan's forecast period. Emissions in years for which consistency with motor vehicle emissions budgets must be demonstrated, as required in paragraph (b) of this section (i.e., each budget year), may be determined by interpolating between the years for which the regional emissions analysis is performed. Table 1-6 below provides a summary of conformity analysis years that apply to the 2018 RTP/2019 FTIP conformity analysis.

**Table 1-6:  
San Joaquin Valley Conformity Analysis Years**

<b>Pollutant</b>	<b>Budget Years<sup>1</sup></b>	<b>Attainment/ Maintenance Year</b>	<b>Intermediate Years</b>	<b>RTP Horizon Year</b>
1997 Ozone	2011, 2014, 2017, 2020	2023	2031/2037	2042
2008 Ozone	2018/2021/2024/2027/2030	2031	2037	2042
PM-10	NA	2020	2027/2035	2042
1997 and 2012 PM2.5	NA	2014/2021 <sup>2</sup>	2027/2035	2042
2006 24-hour PM2.5	2014/2017	2019 <sup>3</sup>	2027/2035	2042

<sup>1</sup>Budget years that are not in the time frame of the transportation plan/conformity analysis are not included as analysis years (e.g., 2011, 2014, 2017), although they may be used to demonstrate conformity.

<sup>2</sup>Note: 2014 is the attainment year for the 1997 PM2.5 standards. 2021 is the attainment year for the 2012 PM2.5 standards.

<sup>3</sup>Note: The 2006 PM2.5 standard must be met as expeditiously as practicable, but no later than December 31, 2019.

For the 1997 ozone standard<sup>3</sup>, the San Joaquin Valley has been classified as an Extreme nonattainment area with an attainment date of June 15, 2024. In accordance with the March 2015 *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements* final rule, the attainment year of 2023 must be modeled. When using the budget test, the attainment year of the 1997 Ozone standard must be analyzed (e.g. 2023).

For the 2008 ozone standard, the San Joaquin Valley has been classified as an Extreme nonattainment area with an attainment date of July 20, 2032. In accordance with the March 2015 *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements* final rule, the attainment year of 2031 must be modeled. When using the budget test, the attainment year of the 2008 Ozone standard must be analyzed (e.g. 2031).

The Clean Air Act requires all states to attain the 1997 PM2.5 standards as expeditiously as practicable beginning in 2010, but by no later than April 5, 2010 unless EPA approves an attainment date extension. States must identify their attainment dates based on the rate of reductions from their control strategies and the severity of the PM2.5 problem. On February 9, 2016 EPA released its proposed *Approval and Disapproval of California Air Plan; San Joaquin Valley Serious Area Plan and Attainment Date Extension for the 1997 PM2.5 NAAQS*. No final EPA action has been taken on the plan. As a result, the proposed SIP budgets are assumed to be

<sup>3</sup> Note that FHWA/FTA *Interim Guidance on Conformity Requirements for the 1997 Ozone NAAQS* issued on April 23 does not require that areas in non-attainment of the 2008 Ozone Standard address 1997 ozone in their regional conformity analyses at this time. However, the SJV MPOs have voluntarily included 1997 ozone conformity demonstration for the 2018 RTP/2019 TIP to minimize project delivery risk.

unavailable for use and the 2008 PM<sub>2.5</sub> Plan conformity budgets are the only budgets applicable at this time for the 1997 PM<sub>2.5</sub> standard.

On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM<sub>2.5</sub> Standard. On May 18, 2016 EPA published proposed approval of the revised 2012 Plan PM<sub>2.5</sub> budgets. Then on August 16, 2016, the 2012 PM<sub>2.5</sub> Plan was approved by EPA, effective September 30, 2016, inclusive of the revised conformity budgets and trading mechanism for the 2006 24-hour PM<sub>2.5</sub> standard. The attainment year of 2019 must be modeled.

On April 15, 2015, EPA classified the San Joaquin Valley as Moderate nonattainment for the 2012 PM<sub>2.5</sub> Standards. In accordance with Section 93.109(i)(3) of the conformity rule, if a 2012 PM<sub>2.5</sub> nonattainment area has adequate or approved SIP budgets that address the annual 1997 PM<sub>2.5</sub> standards, it must use the budget test until new 2012 PM<sub>2.5</sub> standard budgets are found adequate or approved. When using the budget test, the attainment year must be analyzed (e.g. 2021). In addition, in areas that have approved or adequate budgets for the 1997 annual PM<sub>2.5</sub> standards, consistency with those budgets must also be determined. The attainment year of 2021 must be modeled.

## **CHAPTER 2: LATEST PLANNING ASSUMPTIONS AND TRANSPORTATION MODELING**

The Clean Air Act states that “the determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel, and congestion estimates as determined by the MPO or other agency authorized to make such estimates.” On January 18, 2001, the USDOT issued guidance developed jointly with EPA to provide additional clarification concerning the use of latest planning assumptions in conformity determinations (USDOT, 2001).

According to the conformity regulation, the time the conformity analysis begins is “the point at which the MPO or other designated agency begins to model the impact of the proposed transportation plan or TIP on travel and/or emissions.” The conformity analysis and initial modeling began in May 2016.

Key elements of the latest planning assumption guidance include:

- Areas are strongly encouraged to review and strive towards regular five-year updates of planning assumptions, especially population, employment and vehicle registration assumptions.
- The latest planning assumptions must be derived from the population, employment, travel and congestion estimates that have been most recently developed by the MPO (or other agency authorized to make such estimates) and approved by the MPO.
- Conformity determinations that are based on information that is older than five years should include written justification for not using more recent information. For areas where updates are appropriate, the conformity determination should include an anticipated schedule for updating assumptions.
- The conformity determination must use the latest existing information regarding the effectiveness of the transportation control measures (TCMs) and other implementation plan measures that have already been implemented.

The MCTC uses the TP+/ CUBE transportation model. The model was validated in 2016 for the 2010 base year. The latest planning assumptions used in the transportation model validation and Conformity Analysis is summarized in Table 2-1.



**Table 2-1:  
Summary of Latest Planning Assumptions for the MCTC Conformity Analysis**

<b>Assumption</b>	<b>Year and Source of Data (MPO action)</b>	<b>Modeling</b>	<b>Next Scheduled Update</b>
Population	Base Year: 2010  Projections: In August of 2017 the MCTC Policy Board accepted population projections from the 2016 DOF Population Projections.	This data is disaggregated to the TAZ level for input into the TP+/CUBE for the base year validation.	Population projections will be reviewed and updated in preparation for the 2021 FTIP
Employment	Base Year: 2010  Projections:  In January of 2013, the MCTC policy board accepted EDD/Info USA data to develop the 2010 employments baseline while DOF Interim Projections were used to develop the employment projections for Madera County	This data is disaggregated to the TAZ level for input into the TP+/CUBE for the base year validation.	New employment data is anticipated to be included in the next transportation model update in 2020.
Traffic Counts	Traffic data for validation representing the 2010 base validation year were obtained from the MCTC Traffic Counts Program, the cities of Madera and Chowchilla, Madera County and Caltrans.	CUBE was validated using these traffic counts.	All readily available counts are included in each model update.

<b>Assumption</b>	<b>Year and Source of Data (MPO action)</b>	<b>Modeling</b>	<b>Next Scheduled Update</b>
Vehicle Miles of Travel	In March of 2016 , the MCTC Policy Board accepted the 2010 transportation model validation for the 2010 base year.	CUBE is the transportation model used to estimate VMT in XX County.	VMT is an output of the transportation model. VMT is affected by the TIP/RTP project updates and is included in each new conformity analysis.
Speeds	Transportation models were validated using survey data on free flow speeds and common speed flow curves. Speed distributions were updated in EMFAC2014 using methodology approved by ARB and with information from the transportation model.	CUBE. The transportation model includes a feedback loop that assures congested speeds are consistent with travel speeds.  EMFAC2014	A speed study will be conducted every five years, if adequate funds are available.

## A. SOCIOECONOMIC DATA

### POPULATION, EMPLOYMENT AND LAND USE

The conformity regulation requires documentation of base case and projected population, employment, and land use used in the transportation modeling. USDOT/EPA guidance indicates that if the data is more than five years old, written justification for the use of older data must be provided. In addition, documentation is required for how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.

#### *Supporting Documentation:*

For MCTC's Regional Transportation Plan/Sustainable Communities Strategy, population projections from DOF Projections (2016) were used as forecast year control totals.

Because the base year for the plan is 2010, the most recent census data was used for the base year population total. The household totals for each forecast year were estimated using the ratio of population to housing from the 2010 Census, adjusting for population in group quarters.

Employment Development Department/Info USA data was used to develop the MCTC 2010 employment baseline. DOF Projections were used to develop the projections. The population and housing forecasts are listed in Table 2-2. The employment totals for each forecast year were estimated using the ratio of employment from the 2010 base year inventory.

Land use and socioeconomic data at the zonal level are used for determining trip generation in the traffic model. Socio economic data at the Traffic Analysis Zones (TAZ) level were developed based on historic trends and planned development activity in consultation with the local agency representatives of the MCTC Technical Advisory Committee

## **B. TRANSPORTATION MODELING**

The San Joaquin Valley Metropolitan Planning Organizations (MPOs) utilize the TP+/CUBE traffic modeling software. The Valley MPO regional traffic models consist of traditional four-step traffic forecasting models. They use land use, socioeconomic, and road network data to estimate facility-specific roadway traffic volumes. Each MPO model covers the appropriate county area, which is then divided into hundreds or thousands of individual traffic analysis zones (TAZs). In addition the model roadway networks include thousands of nodes and links. Link types include freeway, freeway ramp, other State route, expressway, arterial, collector, and local collector. Current and future-year road networks were developed considering local agency circulation elements of their general plans, traffic impact studies, capital improvement programs, and the State Transportation Improvement Program. The models use equilibrium, a capacity sensitive assignment methodology, and the data from the model for the emission estimates differentiates between peak and off-peak volumes and speeds. In addition, the model is reasonably sensitive to changes in time and other factors affecting travel choices. The results from model validation/calibration were analyzed for reasonableness and compared to historical trends.

Specific transportation modeling requirements in the conformity regulation are summarized below, followed by a description of how the MCTC transportation modeling methodology meets those requirements.

The Madera County travel model is a conventional travel demand forecasting model that is similar in structure to most other current area-wide models used for traffic forecasting. It uses land use, socioeconomic, and road network data to estimate travel patterns, roadway traffic volumes and performance measures.

The study area for the Madera County travel model covers all of Madera County. The county is divided into approximately 705 TAZs. Other travel to and from Madera County is represented by 16 gateway zones at major road crossings of the county line.

The travel demand model land use inputs (socioeconomic data) are aggregated by TAZ. Population related inputs include numbers of housing units stratified by 10 types. Employment-related inputs include employment by 21 employment categories. There are additional inputs possible for "special generators," which would primarily be recreation al uses. Land uses outside of Madera County are represented by existing and projected traffic counts on the gateway roads at the county line.

The travel model roadway network includes nodes and links. Link types include freeway, highway, expressway, arterial, collector and freeway ramps. The model distinguishes between urban, suburban and rural areas. Important road network attributes include distances, number of lanes, uncongested speeds and terrain (flat, rolling or mountain).

Transit service is represented by attributes of each TAZ. If a TAZ is accessible to transit, the peak and off-peak average transit service frequencies are used to estimate transit times.

Four sequential steps (actually sub-models) are involved in the travel demand forecasting process:

- Trip Generation. This initial step translates household and employment data into person trip ends using trip generation rates established during model calibration.
- Trip Distribution. The second general step estimates how many trips travel from one zone to any other zone. The distribution is based on the number of trip ends generated in each of the two zones, and on factors that relate the likelihood of travel between any two zones to the travel time between the two zones.
- Mode Choice. This step estimates the proportions of the total person trips using drive alone or shared-ride auto, transit or non-motorized modes for travel between each pair of zones.
- Trip Assignment. In this final step, vehicle trips or transit trips from one zone to another are assigned to specific travel routes between the zones.

The Madera County travel model estimates travel demand and traffic volumes for the average weekday (Monday through Friday) daily time period, and traffic volumes for the A.M. and P.M. peak commute 3-hour periods and peak hours. Weekend peak traffic volumes could be estimated based on the weekday traffic volume forecasts and ratios of existing weekend-to-weekday traffic volumes measured from traffic counts.

The Madera County travel model includes a feedback loop that uses the congested speeds estimated from traffic assignment to recalculate the trip distribution. The feedback loop is also used to input congested road speeds to the mode choice process.

The Madera County travel model was validated by comparing its estimates of year 2010 traffic volumes with approximately 460 traffic counts from comparable years (2007-2010). The validation is compared to standard criteria for replicating total traffic volumes on various road types and for percent error on links.

MCTC does plan to update its traffic modeling and forecasting tools in 2018/2019 and 2019/2020 fiscal years. This update will include new traffic calibration utilizing more recent data related to observed traffic behavior. Recourses are allocated towards this effort and this update has been planned for in the MCTC Overall Work Program.

## TRAFFIC COUNTS

The conformity regulation requires documentation that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the date of the conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).

### *Supporting Documentation:*

Traffic data for validation representing the 2010 base validation year were obtained from MCTC, the cities of Madera and Chowchilla, Madera County and Caltrans.

The Madera County travel model traffic validation is based on several criteria, including vehicle miles of travel (VMT), total volume by road type, and percent of links within acceptable limits. The Madera model is within two percent of total daily traffic counts (1.02%). This is within the target of +/- 5.0 percent for overall traffic volume.

## SPEEDS

The conformity regulation requires documentation of the use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes. In addition, documentation of the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used to model mode split. Finally, document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.

### *Supporting Documentation:*

The valley traffic models include a feedback loop that uses congested travel times as an input to the trip distribution step. The feedback loop ensures that the congested travel speeds used as input to the air pollution emission models are consistent with the travel speeds used throughout the traffic model process.

The MCTC traffic model includes a feedback loop that uses congested travel times as an input to the trip distribution step. The feedback loop ensures that the congested travel speeds used as input to the air pollution emission models are consistent with the peak hour and off peak travel speeds used throughout the traffic model process.

## TRANSIT

The conformity regulation requires documentation of any changes in transit operating policies and assumed ridership levels since the previous conformity determination. Document the use of the latest transit fares and road and bridge tolls.

MCTC's transit fares have remained static since the last conformity determination adopted on September 21, 2016 or as amended on October 10, 2017. The MCTC travel model does not have a transit network to assign transit trips to making the model insensitive to transit ridership changes. For the purpose of conformity demonstration, no changes to transit ridership levels are noted.

### *Supporting Documentation:*

The current version of the Madera County model estimates transit travel times based on service frequency and auto times. Bus routes are not directly coded into the model. Instead, each TAZ is designated by the average frequency of peak and off-peak transit service provided within walking distance of the TAZ.

Bus travel times are derived from the road network. A factor of 2.0 times the travel time for vehicles traveling at the prevailing road speed was found to generally match scheduled bus operating speeds.

Average wait times for bus trips are estimated as one-half of the maximum of the transit frequencies at the origin and destination of each trip. For example, if a particular trip has 70 minute service at the origin end and 35 minute service at the destination end, the average wait time will be estimated as one half of 70 minutes (the maximum of 70 and 35) or 35 minutes average wait time.

The mode choice model extends the definition of "mode" beyond the basic auto and transit options. In the Madera County model, both 2-person and 3+-person autos are predicted separately so as to retain the capability of analyzing 2-person vs. 3-person minimum carpool occupancy policies for HOV lanes. The model also predicts "walk access" to transit separately from "drive access" to better represent the tradeoffs between access modes, and to provide a clearer analysis of passenger facility usage and requirements at transit stations for walk, feeder bus, park/ride and kiss/ride transit access options. In all, the mode choice model predicts the following seven modes:

1. Drive Alone (DA)
2. 2-Person vehicle (SR2)
3. 3+-Person vehicle (SR3)
4. Walk to transit (TW)
5. Drive to transit (TD)
6. Bicycle (BK)
7. Walk (WK)

This set of alternative modes permits analysis of the trade-offs that will occur with a wide range of transportation projects or policies.

The Madera County model performs mode choice calculations separately for eight trip purposes (not including the three truck trip purposes), three household categories and two time periods:

Trip Purposes

1. Home-Work
2. Home-Shop
3. Home-K12
4. Home-College
5. Home-Other
6. Work-Other
7. Other-Other
8. Highway Commercial

Household Categories

1. Zero Auto Households
2. One Auto Households
3. Two-Plus Auto Households

Time Periods

1. Peak Transit Service (3-hour A.M. and 3-hour P.M. periods)
2. Off-Peak Transit Service (All other 18 hours)

Each of the household categories has a different likelihood of using transit and therefore model constants are estimated separately for each category.

## **VALIDATION/CALIBRATION**

The conformity regulation requires documentation that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.). In addition, documentation of how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices is required. The use of HPMS, or a locally developed count-based program or procedures that have been chosen to reconcile and calibrate the network-based travel model estimates of VMT must be documented.

*Supporting Documentation:*

The models were validated by comparing its estimates of base year traffic conditions with base year traffic counts. The base year validations meet standard criteria for replicating total traffic volumes on various road types and for percent error on links. The base year validation also meets standard criteria for percent error relative to traffic counts on groups of roads (screen-lines) throughout each county.

For Serious and above nonattainment areas, transportation conformity guidance, Section 93.122(b)(3) of the conformity regulation states:

*Highway Performance Monitoring System (HPMS) estimates of vehicle miles traveled (VMT) shall be considered the primary measure of VMT within the portion of the nonattainment or maintenance area and for the functional classes of roadways included in HPMS, for urban areas which are sampled on a separate urban area basis. For areas with network-based travel models, a factor (or factors) may be developed to reconcile and calibrate the network-based travel model estimates of VMT in the base year of its validation to the HPMS estimates for the same period. These factors may then be applied to model estimates of future VMT. In this factoring process, consideration will be given to differences between HPMS and network-based travel models, such as differences in the facility coverage of the HPMS and the modeling network description. Locally developed count-based programs and other departures from these procedures are permitted subject to the interagency consultation procedures.*

The Madera County travel model traffic validation is based on several criteria, including vehicle miles of travel (VMT), total volume by road type, and percent of links within acceptable limits. The Caltrans Highway Performance Monitoring System (HPMS) estimates vehicle miles of travel for each county based on a sample of traffic counts on various road types. Vehicle miles of travel were estimated from the travel demand model by multiplying link volumes by link distances.

Evaluation Criterion	HPMS	Model	% Deviation
+/- 5%	4,785,470	4,636,110	-3.1%
Notes: Daily Vehicle Miles Traveled. Highway Performance Management System – 2010 California Public Road Data, Table 11.			

The Madera Model VMT estimate is 3.1 percent lower than the Caltrans HPMS target. This is within the target of +/- 5.0 percent.

## FUTURE NETWORKS

The conformity regulation requires that a listing of regionally significant projects and federally-funded non-regionally significant projects assumed in the regional emissions analysis be provided in the conformity documentation. In addition, all projects that are exempt must also be documented.

§93.106(a)(2)ii and §93.122(a)(1) requires that regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year be documented for both Federally funded and non-federally funded projects (see Appendix B).



§93.122(a)(1) requires that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis. It is assumed that all SJV MPOs include these projects in the transportation network (see Appendix B).

§93.126, §93.127, §93.128 require that all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis be documented. In addition, the reason for the exemption (Table 2, Table 3, traffic signal synchronization) must also be documented (see Appendix B). It is important to note that the CTIPs exemption code is provided in response to FHWA direction.

*Supporting Documentation:* The build highway networks include qualifying projects based on the 2015 Federal Transportation Improvement Program (2015 FTIP) and the 2014 Regional Transportation Plan (2014 RTP). Not all of the street and freeway projects included in the TIP/RTP qualify for inclusion in the highway network. Projects that call for study, design, or non-capacity improvements are not included in the networks. When these projects result in actual facility construction projects, the associated capacity changes are coded into the network as appropriate. Since the networks define capacity in terms of number of through traffic lanes, only construction projects that increase the lane-miles of through traffic are included.

Generally, Valley TPA highway networks include all roadways included in the county or cities classified system. These links typically include all freeways plus expressways, arterials, collectors and local collectors. Highway networks also include regionally significant planned local improvements from Transportation Impact Fee Programs and developer funded improvements required to mitigate the impact of a new development.

Small-scale local street improvements contained in the TIP/RTP are not coded on the highway network. Although not explicitly coded, traffic on collector and local streets is simulated in the models by use of abstract links called “centroid connectors”. These represent local streets and driveways which connect a neighborhood to a regionally-significant roadway. Model estimates of centroid connector travel are reconciled against HPMS estimates of collector and local street travel.

## C. TRAFFIC ESTIMATES

A summary of the population, employment, and travel characteristics for the MCTC transportation modeling area for each scenario in the Conformity Analysis is presented in Table 2-2.

**Table 2-2:  
Traffic Network Comparison for Horizon Years Evaluated in Conformity Analysis**

<b>Horizon Year</b>	<b>Total Population</b>	<b>Employment</b>	<b>Average Weekday VMT (millions)</b>	<b>Total Lane Miles</b>
2018	161,689	47,785	4.84	N/A
2019	163,261	48,494	4.94	N/A
2020	164,834	49,203	5.15	1,654
2021	167,103	49,903	4.92	N/A
2023	171,642	51,330	5.00	N/A
2024	173,912	52,039	5.00	N/A
2027	181,225	54,167	5.11	1,742
2030	188,791	56,259	5.25	N/A
2031	191,351	57,003	5.29	N/A
2035	201,591	59,839	5.67	1,917
2037	206,662	61,257	5.73	NA
2042	219,277	64,803,	6.08	1,948

#### **D. VEHICLE REGISTRATIONS**

MCTC does not estimate vehicle registrations, age distributions or fleet mix. Rather, current forecasted estimates for these data are developed by CARB and included in the EMFAC2014 model ([http://www.arb.ca.gov/msei/onroad/latest\\_version.htm](http://www.arb.ca.gov/msei/onroad/latest_version.htm)). EMFAC2014 is the most recent model for use in California conformity analyses. Vehicle registrations, age distribution and fleet mix are developed and included in the model by CARB and cannot be updated by the user. EPA issued a federal register notice on December 14, 2015 formally approving EMFAC2014 for conformity.

#### **E. STATE IMPLEMENTATION PLAN MEASURES**

The air quality modeling procedures and associated spreadsheets contained in Chapter 3 Air Quality Modeling assume emission reductions consistent with the applicable air quality plans. The emission reductions assumed for these committed measures reflect the latest implementation status of these measures. Committed control measures in the applicable air quality plans that reduce mobile source emissions and are used in conformity, are summarized below.

## OZONE

Committed control measures in the 2007 8-hour Ozone Plan (as revised in 2015) for the 1997 Ozone standard that reduce mobile source emissions are shown in Table 2-3. However, reductions from these control measures were not applied to this conformity analysis because they were not needed to demonstrate conformity.

**Table 2-3:  
2007 Ozone Plan Measures Assumed in the Conformity Analysis**

Measure Description	Pollutants
Existing Local Reductions: District Rule 9310 (School Bus Fleets)	Summer NOx
Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards	Summer ROG Summer NOx
New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction)	Summer ROG Summer NOx
New/Proposed State Reductions: Smog Check & Reformulated Gas (RFG)	Summer ROG Summer NOx

NOTE: This table is consistent with the 2007 Ozone Plan (as revised in 2015) which was approved by EPA on July 8, 2016 (effective September 30, 2016). State reductions from the Carl Moyer, AB1493, Smog Check and RFG have been included in EMFAC2014.

No committed control measures are included in the 2008 ozone standard conformity demonstration as part of the 2016 Ozone Plan.

## PM-10

Committed control measures in the EPA approved 2007 PM-10 Maintenance Plan that reduce mobile source emissions are shown in Table 2-4. However, reductions from these control measures were not applied to this conformity analysis because they were not needed to demonstrate conformity.

**Table 2-4:  
2007 PM-10 Maintenance Plan Measures Assumed in the Conformity Analysis**

Measure Description	Pollutants
ARB existing Reflash, Idling, and Moyer	PM-10 annual exhaust NOx annual exhaust
District Rule 8061: Paved and Unpaved Roads	PM-10 paved road dust PM-10 unpaved road dust
District Rule 8021 Controls: Construction,	PM-10 road construction dust

Demolition, Excavation, Extraction, and Other Earthmoving Activities	
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NOTE: State reductions from the Carl Moyer, Reflash and Idling have been included in EMFAC2014.

## PM2.5

Committed control measures in the 2008 PM2.5 Plan (as revised) and 2012 PM2.5 Plan (as revised in 2015) that reduce mobile source emissions are shown in Table 2-5 and 2-6, respectively. However, reductions from these control measures were not applied to this conformity analysis because they were not needed to demonstrate conformity.

**Table 2-5:  
2008 PM2.5 (1997 Standard) Plan Measures Assumed in the Conformity Analysis**

Measure Description	Pollutants
Existing Local Reductions: District Rule 9310 (School Bus Fleets)	Annual PM2.5 Annual NOx
Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards	Annual PM2.5 Annual NOx
New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction)	Annual PM2.5 Annual NOx
New/Proposed State Reductions: Smog Check	Annual PM2.5 Annual NOx

NOTE: This table is consistent with the 2008 PM2.5 Plan (as revised in 2011) as approved by EPA on November 9, 2011 (effective January 9, 2012). State reductions from the Carl Moyer, AB1493, and Smog Check have been included in EMFAC2014.

**Table 2-6:**  
**2012 PM2.5 (2006 Standard) Plan Measures Assumed in the Conformity Analysis**

Measure Description	Pollutants
Existing Local Reductions: District Rule 9310 (School Bus Fleets)	Annual PM2.5 Annual NOx
Existing State Reductions: Carl Moyer Program & AB 1493 GHG Standards	Annual PM2.5 Annual NOx
New/Proposed Local Reductions: District Rule 9410 (Employer Based Trip Reduction)	Annual PM2.5 Annual NOx
New/Proposed State Reductions: Smog Check	Annual PM2.5 Annual NOx

NOTE: This table is consistent with the 2012 PM2.5 Plan (as revised in 2015) approved by EPA on August 16, 2016 (effective September 30, 2016). State reductions from the Carl Moyer, AB1493 and Smog Check have been included in EMFAC2014.

## **CHAPTER 3: AIR QUALITY MODELING**

The model used to estimate vehicle exhaust emissions for ozone precursors and particulate matter is EMFAC2014. CARB emission factors for PM10 have been used to calculate re-entrained paved and unpaved road dust, and fugitive dust associated with road construction. For this conformity analysis, model inputs not dependent on the TIP or RTP are consistent with the applicable SIPs, which include:

- The 2007 Ozone Plan (1997 Standard), as revised in 2015, was approved by EPA on July 8, 2016 (effective September 30, 2016).
- The 2016 Ozone Plan (2008 standard) was adopted by the Air District on June 16, 2016 and subsequently adopted by the ARB on July 21, 2016. EPA found the new ozone budgets adequate on June 29, 2017 (effective July 14, 2017).
- The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016).
- The 2008 PM2.5 Plan (1997 Standards), as revised in 2011, was approved by EPA on November 9, 2011 (effective January 9, 2012).
- The 2012 PM2.5 Plan was approved by EPA on August 16, 2016 (effective September 30, 2016) inclusive of the revised conformity budgets and PM2.5 trading mechanism.

The conformity regulation requirements for the selection of the horizon years are summarized in Chapter 1; regional emissions have been estimated for the horizon years summarized in Table 1-6.

### **A. EMFAC2014**

The EMFAC model (short for EMISSION FACTOR) is a computer emissions modeling software that estimates emission rates for motor vehicles for calendar years from 2000 to 2050 operating in California. Pollutant emissions for hydrocarbons, carbon monoxide, nitrogen oxides, particulate matter, lead, sulfur oxides, and carbon dioxide are output from the model. Emissions are calculated for passenger cars, light, heavy, and medium-duty trucks, motorcycles, buses and motor homes.

EMFAC is used to calculate current and future inventories of motor vehicle emissions at the state, county, air district, air basin, or MPO level. EMFAC contains default vehicle activity data that can be used to estimate a motor vehicle emissions inventory in tons/day for a specific year and season, and as a function of ambient temperature, relative humidity, vehicle population, mileage accrual, miles of travel, and vehicle speeds.

Section 93.111 of the conformity regulation requires the use of the latest emission estimation model in the development of conformity determinations. On December 30, 2014, ARB released EMFAC2014, which is the latest update to the EMFAC model for use by California State and local governments to meet Clean Air Act (CAA, 1990) requirements. Nearly a year later, on December 14, 2015, EPA announced the availability of this latest version of the California EMFAC model for use in SIP development in California. EMFAC2014 will be required for conformity analysis on or after December 14, 2017, or when conformity budgets modeled with EMFAC2014 are found adequate or approved by EPA.

A transportation data template has been prepared to summarize the transportation model output for use in EMFAC 2014. The template includes allocating VMT by speed bin by hour of the day. EMFAC2014 was used to estimate exhaust emissions for CO, ozone, PM-10, and PM2.5 conformity demonstrations consistent with the applicable air quality plan. Note that the statewide SIP measures documented in Chapter 2 are already incorporated in the EMFAC2014 model.

## **B. ADDITIONAL PM-10 ESTIMATES**

PM-10 emissions for re-entrained dust from travel on paved and unpaved roads will be calculated separately from roadway construction emissions. It is important to note that with the final approval of the 2007 PM-10 Maintenance Plan, EPA approved a methodology to calculate PM-10 emissions from paved and unpaved roads in future San Joaquin Valley conformity determinations. The Conformity Analysis uses these methodologies and estimates construction-related PM-10 emissions consistent with the 2007 PM-10 Maintenance Plan. The National Ambient Air Quality Standards for PM-10 consists of a 24-hour standard, which is represented by the motor vehicle emissions budgets established in the 2007 PM-10 Maintenance Plan. It is important to note that EPA revoked the annual PM-10 Standard on October 17, 2006. The PM-10 emissions calculated for the conformity analysis represent emissions on an annual average day and are used to satisfy the budget test.

## **CALCULATION OF REENTRAINED DUST FROM PAVED ROAD TRAVEL**

On January 13, 2011 EPA released a new method for estimating re-entrained road dust emissions from cars, trucks, buses, and motorcycles on paved roads. On February 4, 2011, EPA published the *Official Release of the January 2011 AP-42 Method for Estimating Re-Entrained Road Dust from Paved Roads* approving the January 2011 method for use in regional emissions analysis and beginning a two year conformity grace period, after which use of the January 2011 AP-42 method is required (e.g. February 4, 2013) in regional conformity analyses.

The road dust calculations have been updated to reflect this new methodology. More specifically, the emission factor equation and k value (particle size multiplier) have been updated accordingly. CARB default assumptions for roadway silt loading by roadway class, average vehicle weight, and rainfall correction factor remain unchanged. Emissions are estimated for five roadway classes including freeways, arterials, collectors, local roads, and rural roads. Countywide VMT information is used for each road class to prepare the emission estimates.

### **CALCULATION OF REENTRAINED DUST FROM UNPAVED ROAD TRAVEL**

The base methodology for estimating unpaved road dust emissions is based on a CARB methodology in which the miles of unpaved road are multiplied by the assumed VMT and an emission factor. In the 2007 PM-10 Maintenance Plan, it is assumed that all non-agricultural unpaved roads within the San Joaquin Valley receive 10 vehicle passes per day. An emission factor of 2.0 lbs PM-10/VMT is used for the unpaved road dust emission estimates. Emissions are estimated for city/county maintained roads.

### **CALCULATION OF PM-10 FROM ROADWAY CONSTRUCTION**

Section 93.122(e) of the Transportation Conformity regulation requires that PM-10 from construction-related fugitive dust be included in the regional PM-10 emissions analysis, if it is identified as a contributor to the nonattainment problem in the PM-10 implementation plan. The emission estimates are based on a CARB methodology in which the miles of new road built are converted to acres disturbed, which is then multiplied by a generic project duration (i.e., 18 months) and an emission rate. Emission factors are unchanged from the previous estimates at 0.11 tons PM-10/acre-month of activity. The emission factor includes the effects of typical control measures, such as watering, which is assumed to reduce emissions by about 50%. Updated activity data (i.e., new lane miles of roadway built) is estimated based on the highway and transit construction projects in the TIP/RTP.

### **PM-10 TRADING MECHANISM**

The PM-10 SIP allows trading from the motor vehicle emissions budget for the PM-10 precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-10 using a 1.5 to 1 ratio. The trading mechanism will be used only for conformity analyses for analysis years after 2005.

## **C. PM<sub>2.5</sub> APPROACH**

EPA and FHWA have indicated that areas violating both the annual and 24-hour standards for PM<sub>2.5</sub> must address all standards in the conformity determination. The San Joaquin Valley currently violates both the 1997 and 2012 annual PM<sub>2.5</sub> standards, and the 1997 and 2006 24-hour PM<sub>2.5</sub> standards; thus the conformity determination includes analyses to all PM<sub>2.5</sub> standards.



The following PM<sub>2.5</sub> approach addresses the 1997 (annual and 24-hour), the 2012 (annual), and the 2006 24-hour standards:

EMFAC2014 incorporates data for temperature and relative humidity that vary by geographic area, calendar year and season. The annual average represents an average of all the monthly inventories. A winter average represents an average of the California winter season (October through February). EMFAC will be run to estimate direct PM<sub>2.5</sub> and NO<sub>x</sub> emissions from motor vehicles for an annual or winter average day as described below.

EPA guidance indicates that State and local agencies need to consider whether VMT varies during the year enough to affect PM<sub>2.5</sub> annual emission estimates. The availability of seasonal or monthly VMT data and the corresponding variability of that data need to be evaluated.

PM<sub>2.5</sub> areas that are currently using network based travel models must continue to use them when calculating annual emission inventories. The guidance indicates that the interagency consultation process should be used to determine the appropriate approach to produce accurate annual inventories for a given nonattainment area. Whichever approach is chosen, that approach should be used consistently throughout the analysis for a given pollutant or precursor. The interagency consultation process should also be used to determine whether significant seasonal variations in the output of network based travel models are expected and whether these variations would have a significant impact on PM<sub>2.5</sub> emission estimates.

The SJV MPOs all use network based travel models. However, the models only estimate average weekday VMT. The SJV MPOs do not have the data or ability to estimate seasonal variation at this time. Data collection and analysis for some studies are in the preliminary phases and cannot be relied upon for other analyses. Some statewide data for the seasonal variation of VMT on freeways does exist. However, traffic patterns on freeways do not necessarily represent the typical traffic pattern for local streets and arterials.

In many cases, traffic counts are sponsored by the MPOs and conducted by local jurisdictions. While some local jurisdictions may collect weekend or seasonal data, typical urban traffic counts occur on weekdays (Tuesday through Thursday). Data collection must be more consistent in order to begin estimation of daily or seasonal variation.

The SJV MPOs believe that the average annual day calculated from the current traffic models and EMFAC2014 represent the most accurate VMT data available. The MPOs will continue to discuss and research options that look at how VMT varies by month and season according to the local traffic models.

It is important to note that the guidance indicates that EPA expects the most thorough analysis for developing annual inventories will occur during the development of the SIP, taking into account the needs and capabilities of air quality modeling tools and the limitations of available data. Prior to the development of the SIP, State and local air quality and transportation agencies may decide to use simplified methods for regional conformity analyses.

The regional emissions analyses in PM<sub>2.5</sub> nonattainment areas must consider directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear, and tire wear. In California, areas will use EMFAC2014. As indicated under the Conformity Test Requirements, re-entrained road dust

and construction-related fugitive dust from highway or transit projects is not included at this time. In addition, NO<sub>x</sub> emissions are included; however, VOC, SO<sub>x</sub>, and ammonia emissions are not.

*1997 Standard* – Since EPA did not take action on the 2017 PM<sub>2.5</sub> Plan, the 2008 PM<sub>2.5</sub> Plan budgets will continue to be used in this conformity analysis. The 2008 PM<sub>2.5</sub> Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012) and contains motor vehicle emission budgets for PM<sub>2.5</sub> and NO<sub>x</sub> established based on average annual daily emissions. The annual inventory methodology contained in the 2008 PM<sub>2.5</sub> Plan (as revised in 2011) and used to establish emissions budgets is consistent with the methodology used herein. The motor vehicle emissions budget for PM<sub>2.5</sub> includes directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SO<sub>x</sub>, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes.

*2006 Standard* – Since EPA did not take action on the 2017 PM<sub>2.5</sub> Plan, the 2012 PM<sub>2.5</sub> Plan (as revised in 2015) budgets will continue to be used in this conformity analysis. On January 20, 2016, EPA finalized reclassification of the San Joaquin Valley to Serious nonattainment for the 2006 24-hour PM<sub>2.5</sub> Standard. On August 16, 2016, the 2012 PM<sub>2.5</sub> Plan was approved by EPA including the revised conformity budgets and a trading mechanism (effective September 30, 2016). The 2012 PM<sub>2.5</sub> Plan (as revised in 2015) contains motor vehicle emission budgets for PM<sub>2.5</sub> and NO<sub>x</sub> established based on average winter daily emissions. The winter inventory methodology contained in the 2012 Plan and used to establish emissions budgets is consistent with the methodology used herein. The motor vehicle emissions budget for PM<sub>2.5</sub> include directly emitted PM<sub>2.5</sub> motor vehicle emissions from tailpipe, brake wear and tire wear. VOC, SO<sub>x</sub>, ammonia, and dust (from paved roads, unpaved roads, and road construction) were found to be insignificant and not included in the motor vehicle emission budgets for conformity purposes. It is important to note that the 2006 24-hour PM<sub>2.5</sub> nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 PM<sub>2.5</sub> standards.

*2012 Standard* – EPA's nonattainment area designations for the 2012 PM<sub>2.5</sub> standard became effective on April 15, 2015. Conformity applies one year after the effective date (April 15, 2016). In accordance with Section 93.109(i)(3) of the federal transportation conformity rule, if a 2012 PM<sub>2.5</sub> area has adequate or approved SIP budgets that address the annual 1997 standards, it must use the budget test until new 2012 PM<sub>2.5</sub> standard budgets are found adequate or approved. It is important to note that the 2012 annual PM<sub>2.5</sub> nonattainment area boundary for the San Joaquin Valley is exactly the same as the nonattainment area boundary for the 1997 and 2006 PM<sub>2.5</sub> standards. Since EPA has not did not take action on the 2017 PM<sub>2.5</sub> Plan, the 2008 PM<sub>2.5</sub> Plan (as revised in 2011) budgets will continue to be used in this conformity analysis.

### **1997 and 2012 PM<sub>2.5</sub> TRADING MECHANISM**

Since EPA did not take action on the 2017 PM<sub>2.5</sub> Plan, consistent with the PM<sub>2.5</sub> implementation rule, the 2008 PM<sub>2.5</sub> Plan budgets and trading mechanism will continue to be used in this conformity analysis.

The 2008 PM<sub>2.5</sub> SIP (as revised in 2011) allows trading from the motor vehicle emissions budget for the PM<sub>2.5</sub> precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM<sub>2.5</sub> using a 1 to 9 ratio. This trading mechanism will be used for the 1997 annual and 24-hour hour and 2012 PM<sub>2.5</sub> standard conformity analyses for analysis years after 2014.

## **2006 PM<sub>2.5</sub> TRADING MECHANISM**

Since EPA did not take action on the 2017 PM<sub>2.5</sub> Plan, consistent with the PM<sub>2.5</sub> implementation rule, the 2012 PM<sub>2.5</sub> Plan budgets and trading mechanism will continue to be used in this conformity analysis.

On August 16, 2016 EPA approved the 2012 PM<sub>2.5</sub> SIP including the PM<sub>2.5</sub> trading mechanism that allows trading from the motor vehicle emissions budget for the PM<sub>2.5</sub> precursor NO<sub>x</sub> to the motor vehicle emissions budget for primary PM-2.5 using an 8 to 1 ratio. This trading mechanism will be used for the 2006 24-hour PM<sub>2.5</sub> standard conformity analysis for analysis years after 2014.

## **D. SUMMARY OF PROCEDURES FOR REGIONAL EMISSIONS ESTIMATES**

New step-by-step air quality modeling instructions were developed for SJV MPO use with EMFAC2014. These instructions were originally provided for interagency consultation in May 2016. EPA, FHWA, and ARB concurred. The EMFAC instructions were subsequently updated to include appropriate conformity analysis years for the 2019 FTIP and 2018 RTP; IAC concurrence was received in January 2018.

Documentation of the conformity analysis for the 2019 FTIP and 2018 RTP is provided in Appendix C, including:

- 2018 RTP Conformity EMFAC Spreadsheet
- 2018 RTP Conformity Paved Road Spreadsheet
- 2018 RTP Conformity Unpaved Road Dust Spreadsheet
- 2018 RTP Conformity Construction Spreadsheet
- 2018 RTP Conformity Totals Spreadsheet

## **CHAPTER 4: TRANSPORTATION CONTROL MEASURES**

This chapter provides an update of the current status of transportation control measures identified in applicable implementation plans. Requirements of the Transportation Conformity regulation relating to transportation control measures (TCMs) are presented first, followed by a review of the applicable air quality implementation plans and TCM findings for the TIP/RTP.

### **A. TRANSPORTATION CONFORMITY REGULATION REQUIREMENTS FOR TCMs**

The Transportation Conformity regulation requires that the TIP/RTP “must provide for the timely implementation of TCMs in the applicable implementation plan.” The Federal definition for the term “transportation control measure” is provided in 40 CFR 93.101:

“any measure that is specifically identified and committed to in the applicable implementation plan that is either one of the types listed in Section 108 of the CAA [Clean Air Act], or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the first sentence of this definition, vehicle technology based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of this subpart.”

In the Transportation Conformity regulation, the definition provided for the term “applicable implementation plan” is:

“Applicable implementation plan is defined in section 302(q) of the CAA and means the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110, or promulgated under section 110(c), or promulgated or approved pursuant to regulations promulgated under section 301(d) and which implements the relevant requirements of the CAA.”

Section 108(f)(1) of the Clean Air Act as amended in 1990 lists the following transportation control measures and technology-based measures:

- (i) programs for improved public transit;
- (ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
- (iii) employer-based transportation management plans, including incentives;
- (iv) trip-reduction ordinances;
- (v) traffic flow improvement programs that achieve emission reductions;

- (vi) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;
- (vii) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;
- (viii) programs for the provision of all forms of high-occupancy, shared-ride services;
- (ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
- (x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
- (xi) programs to control extended idling of vehicles;
- (xii) programs to reduce motor vehicle emissions, consistent with title II, which are caused by extreme cold start conditions;
- (xiii) employer-sponsored programs to permit flexible work schedules;
- (xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
- (xv) programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and
- (xvi) program to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.

#### **TCM REQUIREMENTS FOR A TRANSPORTATION PLAN**

The EPA regulations in 40 CFR 93.113(b) indicate that transportation control measure requirements for transportation plans are satisfied if two criteria are met:

“(1) The transportation plan, in describing the envisioned future transportation system, provides for the timely completion or implementation of all TCMs in the applicable implementation plan which are eligible for funding under Title 23 U.S.C. or the Federal Transit Laws, consistent with schedules included in the applicable implementation plan.

(2) Nothing in the transportation plan interferes with the implementation of any TCM in the applicable implementation plan.”

**TCM REQUIREMENTS FOR A TRANSPORTATION IMPROVEMENT PROGRAM**

Similarly, in 40 CFR Section 93.113(c), EPA specifies three TCM criteria applicable to a transportation improvement program:

“(1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding of TCMs over other projects within their control, including projects in locations outside the nonattainment or maintenance area;

(2) If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform:

- if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or
- if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvement projects, e.g., the Congestion Mitigation and Air Quality Improvement Program;

(3) Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan.”

**B. APPLICABLE AIR QUALITY IMPLEMENTATION PLANS**

Only transportation control measures from applicable implementation plans for the San Joaquin Valley region are required to be updated for this analysis. For this conformity analysis, the applicable implementation plans, according to the definition provided at the start of this chapter, are summarized below.

**APPLICABLE IMPLEMENTATION PLAN FOR OZONE**

The 2007 Ozone Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016). The 2016 Ozone Plan is currently under EPA review. However, both Plans do not include new TCMs for the San Joaquin Valley.

**APPLICABLE IMPLEMENTATION PLAN FOR PM-10**

The 2007 PM-10 Maintenance Plan (as revised in 2015) was approved by EPA on July 8, 2016 (effective September 30, 2016). No new local agency control measures were included in the Plan.

The Amended 2003 PM-10 Plan was approved by EPA on May 26, 2004 (effective June 25, 2004). A local government control measure assessment was completed for this plan. The analysis focused on transportation-related fugitive dust emissions, which are not TCMs by definition. The local government commitments are included in the *Regional Transportation Planning Agency Commitments for Implementation Document, April 2003*.

However, the *Amended 2002 and 2005 Ozone Rate of Progress Plan* contains commitments that reduce ozone related emissions; these measures are documented in the *Regional Transportation Planning Agency Commitments for Implementation Document, April 2002*. These commitments are included by reference in the Amended 2003 PM-10 Plan to provide emission reductions for precursor gases and help to address the secondary particulate problem. Since these commitments are included in the Plan by reference, the commitments were approved by EPA as TCMs.

**APPLICABLE IMPLEMENTATION PLAN FOR PM2.5**

The 2012 PM2.5 Plan was approved by EPA on August 16, 2016 (effective September 30, 2016). The 2008 PM2.5 Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012). However, the Plans do not include any additional TCMs for the San Joaquin Valley.

**C. IDENTIFICATION OF 2002 RACM THAT REQUIRE TIMELY IMPLEMENTATION DOCUMENTATION**

As part of the 2004 Conformity Determination, FHWA requested that each SIP (Reasonably Available Control Measure - RACM) commitment containing federal transportation funding and a transportation project and schedule be addressed more specifically. FHWA verbally requested documentation that the funds were obligated and the project was implemented as committed to in the SIP.

The RTPA Commitment Documents, Volumes One and Two, dated April 2002 (Ozone RACM) were reviewed, using a "Summary of Commitments" table. Commitments that contain specific Federal funding/transportation projects/schedules were identified for further documentation. In some cases, local jurisdictions used the same Federal funding/transportation projects/schedules for various measures; these were identified as combined with ("comb w/") reference as appropriate. A not applicable ("NA") was noted where federally-funded project is vehicle technology based, fuel based, and maintenance based measures (e.g., LEV program, retrofit programs, clean fuels - CNG buses, etc.).

In addition, the RTPA Commitment Document, Volume Three, dated April 2003 (PM-10 BACM) was reviewed, using the Summary of Commitments table. Commitments that contain specific Congestion Mitigation and Air Quality (CMAQ) funding for the purchase and/or operation of street sweeping equipment have been identified. Only one commitment (Fresno - City of Reedley) was identified.

The Project TID Table was developed to provide implementation documentation necessary for the measures identified. Detailed information is summarized in the first five columns, including the commitment number, agency, description, funding and schedule (if applicable).

For each project listed, the TIP in which the project was programmed, as well as the project ID and description have been provided. In addition, the current implementation status of the project has been included (e.g., complete, under construction, etc). MPO staff determined this information in consultation with the appropriate local jurisdiction. Any projects not implemented according to schedule or project changes are explained in the project status column. These explanations are consistent with the guidance and regulations provided in the Transportation Conformity regulation.

Supplemental documentation was provided to FHWA in August and September 2004 in response to requests for information on timely implementation of TCMs in the San Joaquin Valley. The supplemental documentation included the approach, summary of interagency consultation correspondence, and three tables completed by each of the eight MPOs. The Supplemental Documentation was subsequently approved by FHWA as part of the 2004 Conformity Determination.

The Project TID table that was prepared at the request of FHWA for the 2004 Conformity Analysis, has been updated in each subsequent conformity analysis. This documentation has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix D.

In March 2005, the SJV MPOs began interagency consultation with FHWA and EPA to address outstanding RACM/TCM issues. In general, criteria were developed to identify commitments that require timely implementation documentation. The criteria were applied to the 2002 RACM Commitments approved by reference as part of the Amended 2003 PM-10 Plan. In April 2006, EPA transmitted final tables that identified the approved RACM commitments that require timely implementation documentation for the Conformity Analysis. Subsequently, an approach to provide timely implementation documentation was developed in consultation with FHWA.

A new 2002 RACM TID Table was prepared in 2006 to address the more general RACM commitments that require additional timely implementation documentation per EPA. A brief summary of the commitment, including finite end dates if applicable, is included for each measure. The MPOs provided a status update regarding implementation in consultation with their member jurisdictions. If a specific project has been implemented, it is included in the Project TID Table under "Additional Projects Identified". This documentation was included in the Conformity Analysis for the 2007 TIP and 2004 RTP (as amended) that was approved by FHWA in October 2006, as well as the 2015 TIP and 2014 RTP as amended. The 2002 RACM TID Table has been updated as part of this Conformity Analysis. A summary of this information is provided in Appendix D.



## **D. TCM FINDINGS FOR THE TIP AND REGIONAL TRANSPORTATION PLAN**

Based on a review of the transportation control measures contained in the applicable air quality plans, as documented in the two tables contained in Appendix D, the required TCM conformity findings are made below:

The TIP/RTP provide for the timely completion or implementation of the TCMs in the applicable air quality plans. In addition, nothing in the TIP or RTP interferes with the implementation of any TCM in the applicable implementation plan, and priority is given to TCMs.

TCM projects completed since the 2017 FTIP adoption are detailed in Table 4-1 and in Appendix B.

## **E. RTP CONTROL MEASURE ANALYSIS IN SUPPORT OF 2003 PM-10 PLAN**

In May 2003, the San Joaquin Valley MPO Executive Directors committed to conduct feasibility analyses as part of each new RTP in support of the 2003 PM-10 Plan. This commitment was retained in the 2007 PM-10 Maintenance Plan. In accordance with this commitment, MCTC undertook a process to identify and evaluate potential control measures that could be included in the 2018 RTP. The analysis of additional measures included verification of the feasibility of the measures in the PM-10 Plan BACM analysis, as well as an analysis of new PM-10 commitments from other PM-10 nonattainment areas.

A summary of the process to identify potential long-range control measures analysis and results to be evaluated as part of the RTP development was transmitted to the Interagency Consultation (IAC) partners for review. FHWA and EPA concurred with the summary of the long-range control measure approach in September 2009.

The Local Government Control Measures considered in the PM-10 Plan BACM analysis that were considered for inclusion in the 2018 RTP included:

- Paving or Stabilizing Unpaved Roads and Alleys
- Curbing, Paving, or Stabilizing Shoulders on Paved Roads
- Frequent Routine Sweeping or Cleaning of Paved Roads (i.e., funding allocation for the purchase of PM-10 efficient street sweepers for member jurisdictions)
- Repave or Overlay Paved Roads with Rubberized Asphalt

It is important to note that the first three measures considered in the PM-10 Plan BACM analysis (i.e., access points, street cleaning requirements, and erosion clean up) are not applicable for inclusion in the RTP.

With the adoption of each new RTP, the MPOs will consider the feasibility of these measures, as well as identify any other new PM-10 measures that would be relevant to the San Joaquin Valley. MCTC also considered PM-10 commitments from other PM-10 nonattainment areas that had been developed since the previous RTP was approved. Federal websites were reviewed for any PM-10 plans that have been approved since 2012. New PM-10 plans that have been reviewed include:

- A. West Pinal County, AZ Moderate PM-10 Nonattainment Area SIP, submitted December 21, 2015 (EPA approval effective May 31, 2017). Contingency measures include paving or chemically stabilizing unpaved roads.
- B. Owens Valley, CA Serious PM-10 Nonattainment Area SIP, submitted June 9, 2016 (EPA approval effective April 12, 2017). Road dust was determined to be below de minimis thresholds and no mobile source control measures were adopted.
- C. Mammoth Lake, CA PM-10 Redesignation Request and Maintenance Plan, submitted October 21, 2014 (EPA approval effective November 4, 2015). The Mammoth Lake general plan places a cap on the growth of VMT. Contingency measures include improved street sweeping procedures and reduced use of volcanic cinders on roadways.
- D. Las Vegas, NV Serious PM-10 Redesignation Request and Maintenance Plan, submitted September 7, 2012 (EPA approval effective November 5, 2014). Most stringent measures were introduced in 2001. Stabilization of unpaved roads including paving roads with volumes over 150 vehicles per day. Paved road sweeping and mitigation measures.
- E. Payson, AZ PM-10 Limited Maintenance Plan submitted January 23, 2012 (EPA approval effective May 19, 2014). Contingency measures include paving or chemically stabilizing unpaved roads.
- F. South Coast, CA PM-10 Redesignation Request and Maintenance Plan submitted April 28, 2010 (EPA approval effective July 26, 2013). No PM-10 specific dust control measures cited for mobile sources.
- G. Juneau's Mendenhall Valley, AK PM-10 Limited Maintenance Plan submitted February 20, 2009 (EPA approval effective July 8, 2013). The attainment plan control measures included optimizing sanding and de-icing materials to minimize entrainment, spring street sweeping, and paving of dirt roads. No additional measures were identified for the LMP to continue attainment of the NAAQS. Contingency measures include paving of dirt roads and stabilization of unpaved shoulders.
- H. Eugene-Springfield, OR PM-10 Redesignation Request and Limited Maintenance Plan submitted January 13, 2012 (EPA approval effective June 10, 2013). Motor vehicles were not identified as a significant source and no control measures were included for onroad mobile sources.

- I. Sandpoint, ID PM-10 Limited Maintenance Plan submitted December 12, 2011 (EPA approval effective May 23, 2013). Ordinances require the application of certain types of sand in the winter along with increased street sweeping.

Based on review of commitments from other PM-10 nonattainment areas that have been developed since the previous RTP, no additional on-road fugitive dust controls measures are available for consideration.

Based on consultation with CARB and the Air District, MCTC considered priority funding allocations in the 2018 RTP for PM-10 and NO<sub>x</sub> emission reduction projects in the post-attainment year timeframe that go beyond the emission reduction commitments made for the attainment year 2010 for the following four measures:

- (1) Paving or Stabilizing Unpaved Roads and Alleys
- (2) Curbing, Paving, or Stabilizing Shoulders on Paved Roads
- (3) Frequent Routine Sweeping or Cleaning of Paved Roads (i.e., funding allocation for the purchase of PM-10 efficient street sweepers for member jurisdictions); and
- (4) Repave or Overlay Paved Roads with Rubberized Asphalt

MCTC and its member agencies consider both short and long-term PM<sub>10</sub> and PM<sub>2.5</sub> emission reductions to be a priority. Congestion Mitigation and Air Quality (CMAQ) funding has been continuously utilized by MCTC to fund projects for implementation of measures 1, 2 and 3 above and is planned for future implementation as well, so long as the funding is available. MCTC will consider member agency project proposals for use of rubberized asphalt in accordance with adopted program policies, including cost-effectiveness policies. MCTC will continue to work with member jurisdictions and evaluate the ability to proceed with PM-10 projects as part of the FTIP and RTP.

TCM projects completed since the 2017 FTIP adoption are detailed in Table 4-1 and in Appendix B.

**Table 4-1:  
Recently Completed TCM Projects**

TCM Projects Completed Since Last FTIP (2017 FTIP)				
TCM1 - Traffic Flow Improvements				
Project Description			Estimated Cost	Exemption Code (per CTIPs*)
Road 406	Road 400 to 2.5 miles east	Pave dirt roads	\$478,000	1.03
Road 36 and Avenue 12 1/2	Road 36 and Avenue 12 1/2	Install Traffic Signal	\$263,000	5.02
Northbound Road 28	Intersection of Road 28 and Avenue 14 1/2	Left Turn Lane	\$564,000	1.07
North Fork	Road 274 and Road 225	Construct Roundabout	\$490,000	1.07
Madera	Various Locations	Alley Paving	\$185,000	1.1
Madera	Various Locations (No. 2)	Alley Paving	\$815,000	1.1
TCM3 - Bicycle/Pedestrian Program				
Project Description			Estimated Cost	Exemption Code (per CTIPs)
Gateway, Central, 3rd, E Streets	Various Locations Bounded by Gateway, Central, 3rd, E St	Construct Pedestrian Facilities	\$315,000	3.02
Schools (City of Madera)	Sidewalk Construction around Schools and Commercial Areas	Construct Bike/Ped Facilities	\$266,000	3.02

\* See CTIPS Exemption Table, Appendix B

## **CHAPTER 5: INTERAGENCY CONSULTATION**

The requirements for consultation procedures are listed in the Transportation Conformity Regulations under section 93.105. Consultation is necessary to ensure communication and coordination among air and transportation agencies at the local, State and Federal levels on issues that would affect the conformity analysis such as the underlying assumptions and methodologies used to prepare the analysis. Section 93.105 of the conformity regulation notes that there is a requirement to develop a conformity SIP that includes procedures for interagency consultation, resolution of conflicts, and public consultation as described in paragraphs (a) through (e). Section 93.105(a)(2) states that prior to EPA approval of the conformity SIP, “MPOs and State departments of transportation must provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, DOT and EPA, including consultation on the issues described in paragraph (c)(1) of this section, before making conformity determinations.” The Air District adopted Rule 9120 Transportation Conformity on January 19, 1995 in response to requirements in Section 176(c)(4)(c) of the Clean Air Act as amended in 1990. Since EPA has not approved Rule 9120 (the conformity SIP), the conformity regulation requires compliance with 40 CFR 93.105 (a)(2) and (e) and 23 CFR 450.

Section 93.112 of the conformity regulation requires documentation of the interagency and public consultation requirements according to Section 93.105. A summary of the interagency consultation and public consultation conducted to comply with these requirements is provided below. Appendix E includes the public meeting process documentation. The responses to comments received as part of the public comment process are included in Appendix F.

### **A. INTERAGENCY CONSULTATION**

Consultation is generally conducted through the San Joaquin Valley Interagency Consultation Group (combination of previous Model Coordinating Committee and Programming Coordinating Group). The San Joaquin Valley Interagency Consultation (IAC) Group has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley transportation planning and programming (Transportation Improvement Program, Regional Transportation Plan, and Amendments), transportation conformity, climate change, and air quality (State Implementation Plan and Rules). The purpose of the group is to ensure Valley wide coordination, communication and compliance with Federal and California Transportation Planning and Clean Air Act requirements. Each of the eight Valley MPOs and the Air District are represented. In addition, the Federal Highway Administration, Federal Transit Administration, the Environmental Protection Agency, the California Air Resources Board and Caltrans (Headquarters, District 6, and District 10) are all represented. The IAC Group meets approximately quarterly.

The draft boilerplate conformity document was distributed for interagency consultation on January 9, 2018. Comments received have been addressed and incorporated into this version of the analysis.

In addition, the CMAQ Policy Threshold Evaluation was transmitted for interagency consultation on January 25, 2018. No changes to the CMAQ Policy were recommended. The San Joaquin Valley MPO CMAQ policy contains language that says the cost-effectiveness threshold will be evaluated with every FTIP; whereas, the policy itself is to be reviewed with every RTP. As part of the 2019 FTIP development, the threshold was reviewed. The review indicated that a threshold should be retained at the current \$45/lb level. No adverse comments were received

The draft 2018 RTP was released on May 31, 2018 for a 55-day public comment period. The draft 2019 FTIP was released for a 30-day public comment period on June 21, 2018. The Draft Conformity Analysis was released for 30-day public review on August 16, 2018. The public comment periods will be followed by Board adoption on September 19, 2018. Federal approval is anticipated on or before December 31, 2018.

The conformity analysis for the 2019 FTIP and 2018 RTP was developed in consultation with MCTC local partner agencies, including member jurisdictions, Caltrans, and local transit agencies.

## **B. PUBLIC CONSULTATION**

In general, agencies making conformity determinations shall establish a proactive public involvement process that provides opportunity for public review and comment on a conformity determination for FTIPs/RTPs. In addition, all public comments must be addressed in writing.

All MPOs in the San Joaquin Valley have standard public involvement procedures. MCTC has an adopted consultation process and policy for conformity analysis which includes a 30-day public notice and comment period followed by a public hearing. A public meeting is also conducted prior to adoption and all public comments are responded to in writing. The Appendices contain corresponding documentation supporting the public involvement procedures.

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## **CHAPTER 6: TIP AND RTP CONFORMITY**

The principal requirements of the transportation conformity regulation for TIP/RTP assessments are: (1) the TIP and RTP must pass an emissions budget test with a budget that has been found to be adequate by EPA for transportation conformity purposes, or an interim emission test; (2) the latest planning assumptions and emission models must be employed; (3) the TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and (4) consultation. The final determination of conformity for the TIP/RTP is the responsibility of the Federal Highway Administration and the Federal Transit Administration.

The previous chapters and the appendices present the documentation for all of the requirements listed above for conformity determinations except for the conformity test results. Prior chapters have also addressed the updated documentation required under the transportation conformity regulation for the latest planning assumptions and the implementation of transportation control measures specified in the applicable air quality implementation plans.

This chapter presents the results of the conformity tests, satisfying the remaining requirement of the transportation conformity regulation. Separate tests were conducted for ozone, PM-10 and PM2.5 (1997 and 2012 PM2.5 standards, and 2006 24-hour PM2.5 standards). The applicable conformity tests were reviewed in Chapter 1. For each test, the required emissions estimates were developed using the transportation and emission modeling approaches required under the transportation conformity regulation and summarized in Chapters 2 and 3. The results are summarized below, followed by a more detailed discussion of the findings for each pollutant. Table 6-1 presents results for ozone (ROG/NO<sub>x</sub>), PM-10 (PM-10/NO<sub>x</sub>), and PM2.5 (PM2.5/NO<sub>x</sub>) respectively, in tons per day for each of the horizon years tested.

### **1997 Ozone:**

For 1997 8-hour ozone<sup>4</sup>, the applicable conformity test is the emissions budget test, using the 2007 Ozone Plan (as revised in 2015) budgets established for ROG and NO<sub>x</sub> for an average summer (ozone) season day. EPA approved the Plan and conformity budgets (as revised in 2015) on July 8, 2016 (effective September 30, 2016). The modeling results for all analysis years indicate that the on-road vehicle ROG and NO<sub>x</sub> emissions predicted for each of the “Build” scenarios are less than the emissions budgets. The TIP/RTP therefore satisfy the conformity emissions test for volatile organic compounds and nitrogen oxides.

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<sup>4</sup> Note that FHWA/FTA *Interim Guidance on Conformity Requirements for the 1997 Ozone NAAQS* issued on April 23 does not require that areas in non-attainment of the 2008 Ozone Standard address 1997 ozone in their regional conformity analyses at this time. However, the SJV MPOs have voluntarily included 1997 ozone conformity demonstration for the 2018 RTP/2019 TIP to minimize project delivery risk.

#### 2008 Ozone:

For 2008 8-hour ozone, the applicable conformity test is the emissions budget test, using the 2016 Ozone Plan budgets established for ROG and NO<sub>x</sub> for an average summer (ozone) season day. EPA found 2016 Ozone Plan conformity budgets adequate on June 29, 2017 (effective July 14, 2017). The modeling results for all analysis years indicate that the on-road vehicle ROG and NO<sub>x</sub> emissions predicted for each of the “Build” scenarios are less than the emissions budgets. The TIP/RTP therefore satisfy the conformity emissions test for volatile organic compounds and nitrogen oxides.

#### PM-10:

For PM-10, the applicable conformity test is the emissions budget test, using the 2007 PM-10 Maintenance Plan budgets for PM-10 and NO<sub>x</sub>. This Plan revisions including conformity budgets was approved by EPA on July 8, 2016 (effective September 30, 2016). The modeling results for all analysis years indicate that the PM-10 emissions predicted for the “Build” scenarios are less than the emissions budget for 2020. The TIP/RTP therefore satisfy the conformity emissions tests for PM-10.

#### 1997 PM2.5 Standards:

Since EPA did not take action on the 2017 PM2.5 Plan, the 2008 PM2.5 Plan budgets will continue to be used in this conformity analysis. For 1997 PM2.5 Standards, the applicable conformity test is the emission budget test, using budgets established in the 2008 PM2.5 Plan. EPA approved the 2008 PM2.5 Plan (as revised in 2011) November 9, 2011 (effective January 9, 2012). The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NO<sub>x</sub> emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

#### 2006 PM2.5 Standard:

Since EPA did not take action on the 2017 PM2.5 Plan, the 2012 PM2.5 Plan (as revised in 2015) budgets will continue to be used in this conformity analysis. For the 2006 PM2.5 standard, the applicable conformity test is the emission budget test, using adequate budgets established in the 2012 PM2.5 Plan (as revised in 2015). The modeling results for all analysis years indicate that the on-road vehicle PM2.5 and NO<sub>x</sub> emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM2.5 and nitrogen oxides.

#### 2012 PM2.5 Standard:

In accordance with Section 93.109(c)(2), areas designated nonattainment for the 2012 PM2.5 standards are required to use existing adequate or approved SIP motor vehicle emissions budgets for a prior annual PM2.5 standard until budgets for the 2012 PM2.5 standards are either found adequate or approved. Since EPA has not did not take action on the 2017 PM2.5 Plan, the 2008 PM2.5 Plan (as revised in 2011) budgets will continue to be used in this conformity analysis.

For the 2012 PM<sub>2.5</sub> standards, the applicable conformity test is the emissions budget test, using the 2008 PM<sub>2.5</sub> Plan (1997 standard) budgets. EPA approved the 2008 PM<sub>2.5</sub> Plan (as revised in 2011) November 9, 2011, effective January 9, 2012. The modeling results for all analysis years indicate that the on-road vehicle PM<sub>2.5</sub> and NO<sub>x</sub> emissions predicted for the “Build” scenarios are less than the emissions budget. The TIP/RTP therefore satisfy the conformity emissions test for PM<sub>2.5</sub> and nitrogen oxides.

As all requirements of the Transportation Conformity Regulation have been satisfied, a finding of conformity for the Conformity Analysis for the 2019 FTIP and the 2018 RTP is supported.



**Table 6-1:  
Conformity Results Summary**

2018 RTP Conformity Results Summary -- MADERA					
Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
1997 Ozone*	2020 Budget	1.6	4.5		
	2020	1.4	4.0	YES	YES
	2023 Budget	1.3	2.7		
	2023	1.1	2.3	YES	YES
	2031	0.7	1.6	YES	YES
	2037	0.6	1.5	YES	YES
	2042	0.5	1.5	YES	YES
*1997 Ozone conformity is included due to uncertainty associated with an ongoing litigation related to EPA's revocation of the 1997 ozone standard.					
Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 Ozone	2018 Budget	1.9	5.1		
	2018	1.6	4.5	YES	YES
	2021 Budget	1.5	4.1		
	2021	1.3	3.5	YES	YES
	2024 Budget	1.2	2.6		
	2024	1.0	2.2	YES	YES
	2027 Budget	1.1	2.3		
	2027	0.9	1.9	YES	YES
	2030 Budget	0.9	2.0		
	2030	0.8	1.7	YES	YES
	2031 Budget	0.9	2.0		
	2031	0.8	1.7	YES	YES
	2037	0.6	1.6	YES	YES
	2042	0.6	1.5	YES	YES

*Conformity Analysis for 2019 FTIP and  
2018 RTP*

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
PM-10		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
	2020 Budget	2.5	4.7		
	2020	1.7	4.2	YES	YES
	2020 Budget	2.5	4.7		
	2027	1.8	1.9	YES	YES
	2020 Budget	2.5	4.7		
	2035	2.0	1.6	YES	YES
	2020 Budget	2.5	4.7		
	2042	1.8	1.5	YES	YES
Standard	Analysis Year	Emissions Total		DID YOU PASS?	
1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
	2014 Budget	0.3	8.1		
	2021	0.1	3.6	YES	YES
	2014 Budget	0.3	8.1		
	2027	0.1	1.9	YES	YES
	2014 Budget	0.3	8.1		
	2035	0.1	1.6	YES	YES
	2014 Budget	0.3	8.1		
	2042	0.1	1.5	YES	YES

*Conformity Analysis for 2019 FTIP and  
2018 RTP*

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
<b>2006 PM2.5 Winter 24- Hour Standard</b>		<b>PM2.5 (tons/day)</b>	<b>NOx (tons/day)</b>	<b>PM2.5</b>	<b>NOx</b>
	2017 Budget	0.2	6.0		
	2019	0.2	4.6	<b>YES</b>	<b>YES</b>
	2017 Budget	0.2	6.0		
	2027	0.1	2.0	<b>YES</b>	<b>YES</b>
	2017 Budget	0.2	6.0		
	2035	0.1	1.6	<b>YES</b>	<b>YES</b>
	2017 Budget	0.2	6.0		
	2042	0.1	1.6	<b>YES</b>	<b>YES</b>

<b>PM-10</b>	Total On-Road Exhaust		Paved Road Dust		Unpaved Road Dust		Road Construction Dust		Total	
	PM-10	Nox	PM-10	Nox	PM-10	Nox	PM-10	Nox	PM-10	Nox
2020	0.342	4.212	0.807		0.511		0.055		<b>1.7</b>	<b>4.2</b>
2027	0.318	1.936	0.811		0.511		0.187		<b>1.8</b>	<b>1.9</b>
2035	0.342	1.613	0.839		0.511		0.327		<b>2.0</b>	<b>1.6</b>
2042	0.363	1.545	0.895		0.511		0.066		<b>1.8</b>	<b>1.5</b>

## REFERENCES

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*MCTC*

*Conformity Analysis for 2019 FTIP and  
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## **APPENDIX A**

### **CONFORMITY CHECKLIST**

## CONFORMITY ANALYSIS DOCUMENTATION

### Checklist for MPO TIPs/RTPs January 2018

40 CFR	Criteria	Page	Comments
§93.102	Document the applicable pollutants and precursors for which EPA designates the area as nonattainment or maintenance. Describe the nonattainment or maintenance area and its boundaries.	C1 P9	
§93.102 (b)(2)(iii)	PM10 areas: document whether EPA or state has found VOC and/or NOx to be a significant contributor or if the SIP establishes a budget	CH 1 P 12	
§93.102 (b)(2)(iv)	PM2.5 areas: document if both EPA and the state have found that NOx is <b>not</b> a significant contributor or that the SIP does <b>not</b> establish a budget (otherwise, conformity applies for NOx)	N/A	
§93.102 (b)(2)(v)	PM2.5 areas: document whether EPA or state has found VOC, SO2, and/or NH3 to be a significant contributor or if the SIP establishes a budget	CH 1 P 13	
§93.104 (b, c)	Document the date that the MPO officially adopted, accepted or approved the TIP/RTP and made a conformity determination. Include a copy of the MPO resolution. Include the date of the last prior conformity finding made by DOT.	ES P1	
§93.104 (e)	If the conformity determination is being made to meet the timelines included in this section, document when the new motor vehicle emissions budget was approved or found adequate.	N/A	
§93.106	Document that horizon years are no more than 10 years apart ((a)(1)(i)). Document that the first horizon year is no more than 10 years from the based year used to validate the transportation demand planning model ((a)(1)(ii)). Document that the attainment year is a horizon year, if in the timeframe of the plan ((a)(1)(iii)). Describe the regionally significant additions or modifications to the existing transportation network that are expected to be open to traffic in each analysis year ((a)(2)(ii)). Document that the design concept and scope of projects allows adequate model representation to determine intersections with regionally significant facilities, route options, travel times, transit ridership and land use.	CH 1 P 16 APP B	
§93.108	Document that the TIP/RTP is fiscally constrained	ES P1	

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40 CFR	Criteria	Page	Comments
	(23 CFR 450).		
§93.109 (a, b)	Document that the TIP/RTP complies with any applicable conformity requirements of air quality implementation plans (SIPs) and court orders.	ES P 1 CH 1-6	
§93.109 (c.)	Provide either a table or text description that details, for each pollutant, precursor and applicable standard, whether the interim emissions test(s) and/or the budget test apply for conformity. Indicate which emissions budgets have been found adequate by EPA, and which budgets are currently applicable for what analysis years.	CH 1 P 10-16	
§93.109(e)	CO or PM10: Document if the area has a limited maintenance plan and from where that information comes	N/A	
§93.109(f)	Document if motor vehicle emissions are an insignificant contributor and in what SIP that determination is found	CH 1 P 10-16	
§93.110 (a, b)	Document the use of latest planning assumptions (source and year) at the “time the conformity analysis begins,” including current and future population, employment, travel and congestion. Document the use of the most recent available vehicle registration data. Document the date upon which the conformity analysis was begun.	CH 2 P 10-29	
EPA-DOT guidance	Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (December 2008 guidance.)	CH 2 P 18	
§93.110 (c,d,e,f)	Document any changes in transit operating policies and assumed ridership levels since the previous conformity determination (c). Document the assumptions about transit service, use of the latest transit fares, and road and bridge tolls (d). Document the use of the latest information on the effectiveness of TCMs and other SIP measures that have been implemented (e). Document the key assumptions and show that they were agreed to through Interagency and public consultation (f).	CH 2 P 26-27	
§93.111	Document the use of the latest emissions model approved by EPA. If the previous model was used and the grace period has ended, document that the analysis began before the end of the grace period.	CH 3 P 31	
§93.112	Document fulfillment of the interagency and public consultation requirements outlined in a specific implementation plan according to §51.390 or, if a SIP revision has not been completed, according to §93.105 and 23 CFR 450. Include documentation of	CH 5 P 43-44	

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40 CFR	Criteria	Page	Comments
	consultation on conformity tests and methodologies as well as responses to written comments.		
§93.113	Document timely implementation of all TCMs in approved SIPs. Document that implementation is consistent with schedules in the applicable SIP and document whether anything interferes with timely implementation. Document any delayed TCMs in the applicable SIP and describe the measures being taken to overcome obstacles to implementation.	CH 4 APP D P 39-41	
§93.114	Document that the conformity analyses performed for the TIP is consistent with the analysis performed for the Plan, in accordance with 23 CFR 450.324(f)(2).	Analysis addresses both documents	
For Areas with SIP Budgets:			
§93.118, §93.124	Document what the applicable budgets are, and for what years. Document if there are subarea budgets established, and for which areas (93.124(c)). Document if there is a safety margin established, and what are the budgets with the safety margin included. (93.124(a)). Document if there has been any trading among budgets, and if so, which SIP establishes the trading mechanism, and how it is used in the conformity analysis (93.124(b)). If there is more than one MPO in the area, document whether separate budgets are established for each MPO (93.124(d)).	CH 6 P 47	
§93.118 (a, c, e)	Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the TIP and regionally significant non-Federal projects, are consistent with any adequate or approved motor vehicle emissions budget for all pollutants and precursors in applicable SIPs.	N/A	
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	CH 1 P 16	
§93.118 (d)	Document the use of the appropriate analysis years in the regional emissions analysis for areas with SIP budgets, and the analysis results for these years. Document any interpolation performed to meet tests for years in which specific analysis is not required.	CH 6 P 47-48	
For Areas without Applicable SIP Budgets:			
§93.119	<u>Document whether the area must meet just one or both interim emissions tests. If both, document that it is the “less than” form of these tests (i.e., §93.119(b)(1) and (c)(1) vs. (b)(2), (c)(2), and (d)).</u>	N/A	



40 CFR	Criteria	Page	Comments
§93.119 <sup>9</sup> (a, b, c, d)	Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in any associated donut area that are in the TIP and regionally significant non-Federal projects, are consistent with the requirements of the “Action/Baseline” or “Action/Baseline Year” emissions tests as applicable.	N/A	
§93.119 (e)	Document the appropriate baseline year.	CH 3 P 31	
§93.119 (f)	Document the use of appropriate pollutants and if EPA or the state has made a finding that a particular precursor or component of PM10 is significant or insignificant.	CH 6 P 47	
§93.119 (g)	Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.	N/A	
§93.119 (h, i)	Document how the baseline and action scenarios are defined for each analysis year.	CH 3 P 31	
For All Areas Where a Regional Emissions Analysis Is Needed			
§93.122 (a)(1)	Document that all regionally significant federal and non-Federal projects in the nonattainment/maintenance area are explicitly modeled in the regional emissions analysis. For each project, identify by which analysis year it will be open to traffic. Document that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis	CH 2 P 21-29	
§93.122 (a)(2, 3)	Document that only emission reduction credits from TCMs on schedule have been included, or that partial credit has been taken for partially implemented TCMs (a)(2).  Document that the regional emissions analysis only includes emissions credit for projects, programs, or activities that require regulatory action if: the regulatory action has been adopted; the project, program, activity or a written commitment is included in the SIP; EPA has approved an opt-in to the program, EPA has promulgated the program, or the Clean Air Act requires the program (indicate applicable date). Discuss the implementation status of these programs and the associated emissions credit for each analysis year (a)(3).	CH 4 P 38	
§93.122 (a)(4,5,6,7)	For nonregulatory measures that are not included in the transportation plan and TIP, include written commitments from appropriate agencies (a)(4).  Document that assumptions for measures outside the transportation system (e.g. fuels measures) are the same for baseline and action scenarios (a)(5).	N/A	

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40 CFR	Criteria	Page	Comments
	Document that factors such as ambient temperature are consistent with those used in the SIP unless modified through interagency consultation (a)(6). Document the method(s) used to estimate VMT on off-network roadways in the analysis (a)(7).		
§93.122 (b)(1)(i) <sup>ii</sup>	Document that a network-based travel model is in use that is validated against observed counts for a base year no more than 10 years before the date of the conformity determination. Document that the model results have been analyzed for reasonableness and compared to historical trends and explain any significant differences between past trends and forecasts (for per capita vehicle-trips, VMT, trip lengths mode shares, time of day, etc.).	CH 2 P 21-29	
§93.122 (b)(1)(ii) <sup>ii</sup>	Document the land use, population, employment, and other network-based travel model assumptions.	CH 2 P 21-29	
§93.122 (b)(1)(iii) <sup>ii</sup>	Document how land use development scenarios are consistent with future transportation system alternatives, and the reasonable distribution of employment and residences for each alternative.	CH 2 P 21-29	
§93.122 (b)(1)(iv) <sup>ii</sup>	Document use of capacity sensitive assignment methodology and emissions estimates based on a methodology that differentiates between peak and off-peak volumes and speeds, and bases speeds on final assigned volumes.	CH 2 P 21-29	
§93.122 (b)(1)(v) <sup>ii</sup>	Document the use of zone-to-zone travel impedances to distribute trips in reasonable agreement with the travel times estimated from final assigned traffic volumes. Where transit is a significant factor, document that zone-to-zone travel impedances used to distribute trips are used to model mode split.	CH 2 P 21-29	
§93.122 (b)(1)(vi) <sup>ii</sup>	Document how travel models are reasonably sensitive to changes in time, cost, and other factors affecting travel choices.	CH 2 P 21-29	
§93.122 (b)(2) <sup>ii</sup>	Document that reasonable methods were used to estimate traffic speeds and delays in a manner sensitive to the estimated volume of travel on each roadway segment represented in the travel model.	CH 2 P 21-29	
§93.122 (b)(3) <sup>ii</sup>	Document the use of HPMS, or a locally developed count-based program or procedures that have been chosen through the consultation process, to reconcile and calibrate the network-based travel model estimates of VMT.	CH 2 P 21-29	
§93.122 (d)	In areas not subject to §93.122(b), document the continued use of modeling techniques or the use of appropriate alternative techniques to estimate vehicle miles traveled	CH 2 P 21-29	
§93.122 (e, f)	Document, in areas where a SIP identifies construction-related PM10 or PM2.5 as significant	CH 2 P 21-29	

*Conformity Analysis for 2019 FTIP and  
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40 CFR	Criteria	Page	Comments
	pollutants, the inclusion of PM10 and/or PM2.5 construction emissions in the conformity analysis.		
§93.122 (g)	If appropriate, document that the conformity determination relies on a previous regional emissions analysis and is consistent with that analysis, i.e. that:	CH 2 P 21-29	
	(g)(1)(i): the new plan and TIP contain all the projects that must be started to achieve the highway and transit system envisioned by the plan	CH 2 P 21-29	
	(g)(1)(ii): all plan and TIP projects are included in the transportation plan with design concept and scope adequate to determine their contribution to emissions in the previous determination;	CH 2 P 21-29	
	(g)(1)(iii): the design concept and scope of each regionally significant project in the new plan/TIP are not significantly different from that described in the previous;	CH 3 P 30-31	
	(g)(1)(iv): the previous regional emissions analysis meets 93.118 or 93.119 as applicable	N/A	
§93.126, §93.127, §93.128	Document all projects in the TIP/RTP that are exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, traffic signal synchronization) and that the interagency consultation process found these projects to have no potentially adverse emissions impacts.	CH 2 P 27 APP B	

<sup>i</sup> Note that some areas are required to complete both Interim emissions tests.

<sup>ii</sup> 40 CFR 93.122(b) refers only to serious, severe and extreme ozone areas and serious CO areas above 200,000 population. Also note these procedures apply in any areas where the use of these procedures has been the previous practice of the MPO (40 CFR 93.122(d)).

#### Disclaimers

This checklist is intended solely as an informational guideline to be used in reviewing Transportation Plans and Transportation Improvement Programs for adequacy of their conformity documentation. It is in no way intended to replace or supersede the Transportation Conformity regulations of 40 CFR Parts 51 and 93, the Statewide and Metropolitan Planning Regulations of 23 CFR Part 450 or any other EPA, FHWA or FTA guidance pertaining to transportation conformity or statewide and metropolitan planning. This checklist is not intended for use in documenting transportation conformity for individual transportation projects in nonattainment or maintenance areas. 40 CFR Parts 51 and 93 contain additional criteria for project-level conformity determinations.

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**APPENDIX B**  
**TRANSPORTATION PROJECT LISTING**

## REGIONALLY SIGNIFICANT PROJECT LISTING

						Conformity Analysis Years (Open to Traffic)													
Agency	CTIPS Project ID (if available)	Route	Project Limits	Planned Improvement	Cost	2018	2019	2020	2021	2023	2024	2027	2030	2031	2035	2037	2042		
Chowchilla		SR 233 (Robertson Blvd)	15th St to Palm Pkwy	Restripe to 4 Lanes	\$ 1,000,000					X									
Chowchilla		SR 99	SR 233 Interchange	Interchange Operational Improvements	\$ 16,000,000						X								
Chowchilla		Ave 26	SR 99 to Coronado St	2 Lanes to 4 Lanes	\$ 10,000,000							X							
Chowchilla		Fig Tree Rd	SR 99 Overcrossing	2 Lane Overcrossing to Chowchilla Blvd	\$ 14,000,000								X						
County		SR 41	SR 145 to Rd 208 (tie into new constructed Passing Lanes )	Passing Lanes	\$ 11,000,000					X									
County		Oakhurst Midtown Bypass	Rd 427 to SR 41	New 2 Lane	\$ 13,350,000			X											
County		Rd 40	Ave 10 to Ave 12	2 Lanes to 4 Lanes	\$ 11,100,000			X											
County		Ave 9	Rd 38 to Children's Blvd	2 Lanes to 4 Lanes	\$ 9,730,000							X							
County		Ave 9	SR 99 to Rd 33 1/2	2 Lanes to 4 Lanes	\$ 8,100,000			X											
County		SR 41	Madera County Line to Ave 10	4 Lanes to 6 Lanes	\$ 5,800,000														
County		SR 41	Ave 10 to Ave 12	6 Lanes Freeway / Interchange at Ave 12	\$ 101,000,000												X		
County		SR 41	Ave 10 1/2 to Ave 12	3 Lane to 4 Lane Expressway	\$ 45,800,000					X									
County		SR 41	Ave 12 to 15	2 Lane Conventional to 4 Lane Expressway	\$ 61,000,000						X								
County		Ave 12	Rd 30 1/2 to Rd 36	2 Lanes to 4 Lanes	\$ 21,100,000								X						
County		Ave 12	Rd 38 to SR 41	2 Lanes to 4 Lanes	\$ 13,450,000								X						
County		Ave 12 By-Pass	Rd 36 to Rd 38	New 2 Lanes	\$ 38,700,000								X						
County		Ave 12	SR 41 to Flagbarn Rd	2 Lanes to 4 Lanes	\$ 4,250,000								X						
County		SR 49	Meadow Vista Dr. to Westlake Dr	2 Lanes to 4 Lanes	\$ 7,000,000										X				
County		Ave 10	Rd 40 to Lanes Bridge	Widen to 4 Lanes	\$ 8,200,000												X		
County		Children's Blvd	SR 41 NB Ramps to Crocket Way	4 Lanes to 6 Lanes	\$ 6,600,000												X		
County		SR 41	Ave 15 to SR 145	2 Lanes to 4 Lanes	\$ 45,000,000												X		
County		Rio Mesa Blvd.	Children's Blvd to Ave 12	2 Lanes to 4 Lanes	\$ 9,750,000										X				
County		Rio Mesa Blvd.	Ave 12 to Ave 15	New 4 Lanes Road	\$ 16,250,000								X						
Madera		Lake St	4th St to Cleveland Ave	2 Lanes to 4 Lanes	\$ 5,000,000					X									
Madera		Olive Ave	Gateway to Roosevelt	2 Lanes to 4 Lanes	\$ 6,000,000		X												
Madera		Cleveland Ave	Sharon Ave to Tozer St	Restripe to 4 Lanes	\$ 500,000							X							
Madera		Aviation Dr	Extend to Ave 17	New 2 Lane	\$ 1,500,000							X							
Madera		Yeager Dr	Falcon Dr to Aviation Dr	New 2 Lane	\$ 1,500,000							X							
Madera		Ellis St	Rd 26 to Krohn St	2 Lanes to 4 Lanes	\$ 5,875,000							X							
Madera		Westberry Blvd	At Fresno River	New 4 Lane bridge	\$ 13,000,000							X							
Madera		Ave 17	SR 99 Interchange	Interchange Improvements/Widen Structure	\$ 56,686,000					X									
Madera		Cleveland Ave	Schnoor St to SR 99	4 Lanes to 6 Lanes	\$ 3,750,000							X							
Madera		Gateway Dr	Yosemite Ave to Cleveland Ave	2 Lanes to 4 Lanes	\$ 8,600,000							X							
Madera		Gateway Dr	Olive to 9th	2 Lanes to 4 Lanes	\$ 2,671,000								X						
Madera		Ellis St	Rd 26 to Lake St	2 Lanes to 4 Lanes	\$ 3,915,000								X						
Madera		Schnoor St	Trevor Wy to Sunset Ave	Overlay/restripe to 4 Lanes	\$ 1,107,000								X						
Madera		Sharon Blvd	Ave 17 to 1320 feet South	New 4 Lane road	\$ 3,700,000		X												
Madera		Sharon Blvd	1320 feet South of Ave 17 to Ellis St.	New 4 Lane road	\$ 5,000,000								X						
Madera		Granada Dr	At Fresno River	Widen Structure 2 Lanes to 4 Lanes	\$ 6,500,000								X						
Madera		Westberry Blvd	Cleveland Ave to Ave 16	2 Lanes to 4 Lanes	\$ 2,717,000								X						
Madera		Howard Rd	Westberry Blvd to Granada Dr	2 Lanes to 4 Lanes	\$ 4,674,000								X						
Madera		Pecan Ave	Golden State Blvd to Stadium Rd	2 Lanes to 4 Lanes	\$ 4,674,000								X						
Madera		Pine St	Almond Ave to Madera South High School Driveway	2 Lanes to 4 Lanes	\$ 2,000,000								X						
Madera		Sunset Ave	4th St to Westberry Blvd	2 Lanes to 4 Lanes	\$ 3,000,000											X			
Madera		D St	Clark St to Adell St	2 Lanes to 4 Lanes	\$ 1,500,000											X			
Madera		Rd 29	Olive Ave to Ave 13	2 Lanes to 4 Lanes	\$ 8,099,000											X			
Madera		Rd 29	Ave 12 to Ave 13	2 Lanes to 4 Lanes	\$ 8,100,000											X			
Madera		Rd 29	Ave 14 to Ave 15	2 Lanes to 4 Lanes	\$ 4,721,000											X			
Madera		SR 145	Ave 12 to Ave 13 1/2	2 Lanes to 4 Lanes	\$ 4,015,000											X			
Madera		SR 145	SR 99 to Yosemite Ave	2 Lanes to 4 Lanes	\$ 5,537,000											X			
Madera		Stadium Rd	Pecan Ave to Maple St	2 Lanes to 4 Lanes	\$ 1,210,000											X			
Madera		Sunrise Ave	B Street to Rd 28	2 Lanes to 4 Lanes	\$ 3,000,000								X						
Madera		Tozer St/Rd 28	Ave 13 to Knox St	2 Lanes to 4 Lanes	\$ 2,000,000											X			
Madera		Howard Rd	Pine St to Schnoor St	4 Lanes to 5 Lanes	\$ 5,000,000												X		
Madera		Ave 17	Rd 23 to Golden State Blvd	2 Lanes to 4 Lanes	\$ 3,000,000				X										
Madera		Ave 17	Rd 26 to Rd 27	2 Lanes to 4 Lanes	\$ 3,000,000												X		
Madera		Rd 23	Ave 15 1/2 to Ave 17	2 Lanes to 4 Lanes	\$ 15,000,000					X									
State		SR 99	Ave 12 to Ave 17	4 Lanes to 6 Lanes	\$ 81,395,000					X									
State		SR 99	Ave 7 to Ave 12	4 Lanes to 6 Lanes	\$ 188,000,000										X				
State		SR 99	Ave 17 to Ave 21 1/2	4 Lanes to 6 Lanes	\$ 50,000,000											X			

## EXEMPT PROJECT LISTING

Jurisdiction/Agency	TIP/RTP Project ID	CTIPs Project ID	Description			Estimated Cost	Exemption Code (per CTIPs - next sheet)
TCM1 - Traffic Flow Improvements							
CHOW/CITY	MAD302053	22100000289	Ave 24 1/2	UPRR to Road 15 1/2	Shoulder Paving	\$300,000	1.04
MADCO	MAD102056	22100000242	Road 30	Avenue 12 to 500 ft. north	Shoulder Paving, Curb and Gutter	\$506,000	1.04
MADCO	MAD102060	22100000286	Road 23	Ave 8 1/2 to Ave 9 1/2	Shoulder Paving	\$187,000	1.04
MADCO	MAD102061	22100000288	Ave 9	Road 23 to Road 23 1/2	Shoulder Paving	\$99,000	1.04
MADCO	MAD102073	22100000370	Road 36	Avenue 9 to Avenue 12	Shoulder Paving	\$563,000	1.04
MADCO	MAD102074	22100000371	Road 36	Avenue 12 1/2 to Avenue 15	Shoulder Paving	\$469,000	1.04
MADCO	MAD102075	22100000372	Road 36	Avenue 15 to Highway 145	Shoulder Paving	\$563,000	1.04
MADCO	MAD102076	22100000373	Road 209	SR 41 to 4.6 miles North	Shoulder Paving	\$863,000	1.04
MADCO	MAD102077	22100000374	Road 23	Avenue 14 to Avenue 15 1/2, 18 1/2 South 2,000 linear feet	Shoulder Paving	\$357,000	1.04
MADCO	MAD102079	22100000376	Road 12	Avenue 25 to City Limits (1 mile)	Shoulder Paving	\$188,000	1.04
MADCITY	MAD202072	22100000284	Raymond Road	Raymond Road	Shoulder Paving, Curb and Gutter	\$314,000	1.04
MADCITY	MAD202079	22100000333	Madera	Sports Complex	Shoulder Paving, Curb, Gutter	\$306,000	1.04
MADCITY	MAD202080	22100000334	Madera	Various Locations	Alley Paving	\$185,000	1.10
MADCITY	MAD202081	22100000335	Madera	Intersections of 4th Street, Lake Street, and Central Avenue	Intersection Improvements	\$566,000	1.07
MADCITY	MAD202090	22100000380	Golden State Boulevard	Pecan to Madera Community Hospital Entrance	Shoulder Paving	\$125,000	1.04
MADCITY	MAD202091	22100000381	Pecan Avenue	Pine to Golden State Boulevard	Shoulder Paving	\$665,000	1.04
MADCITY	MAD202095	22100000385	Madera	Purchase and Install Adaptive Signal Control Technology	Traffic Signal Upgrades	\$135,000	5.07
TCM2 - Public Transit							
CHOW/CITY	MAD313036	22100000295	CATX	Operating Assistance		\$1,995,000	2.01
MADCO	MAD113041	22100000298	MCC	Operating Assistance		\$2,226,000	2.01
MADCO	MAD113049	22100000397	Preventative Maintenance	Operating Assistance		\$315,000	2.01
MADCITY	MAD213091	22100000302	DAR	Operating Assistance		\$4,666,000	2.01
MADCITY	MAD213092	22100000303	MAX	Operating Assistance		\$4,876,000	2.01
MADCITY	MAD213093	22100000304	Intermodal Center	Operating Assistance		\$560,000	2.01
MADCITY	MAD213094	22100000321	MAX Preventative Maintenance	Operating Assistance		\$710,000	2.01
MADCITY	MAD202092	22100000382	Expand MAX to Madera Community College	Operating Assistance		\$140,000	2.01
MADCITY	MAD213104	22100000403	Transit Facility Operating Assistance	Operating Assistance		\$230,000	2.01
TCM3 - Bicycle/Pedestrian Program							
MADCO	MAD102059	22100000249	Road 225	Creek Dr to Road 228	Construct Pedestrian Facilities	\$555,000	3.02
MADCO	MAD102080	22100000377	Road 30	Avenue 12 to 500 ft. North	Construct Pedestrian Facilities	\$107,000	3.02
MADCITY	MAD202046	22100000160	Fresno River Trail	Gateway & UPRR	Construct Bike/Ped Undercrossing	\$534,000	3.02
MADCITY	MAD202069	22100000284	Tulare St, Cleveland, Raymond Rd	Tulare, Cleveland, Raymond Road	Construct Bike/Ped Facilities	\$336,000	3.02
MADCITY	MAD202074	22100000315	Cleveland Avenue	Cleveland Avenue to Fresno River on MID	Construct Bike/Ped Facilities	\$379,000	3.02
MADCITY	MAD202082	22100000336	Fresno River Trail	Schnoor North to MID, North Bank Phase I	Construct Class I Bike Path	\$455,000	3.02
MADCITY	MAD202083	22100000337	Schnoor Avenue	Sidewalk Construction Between Sunset Avenue and Fresno River	Construct Pedestrian Facilities	\$150,000	3.02
MADCITY	MAD202086	22100000340	Fresno River Trail	Between North-South Trail Behind Montecito Park and Granada Drive (Phase II)	Construct Bike/Ped Facilities	\$146,000	3.02
TCM5 - Alternative Fuels Program							
CHOW/CITY	MAD302056	22100000368	Chowchilla	Purchase 1 CNG Street Sweeper	Fleet Conversion	\$313,000	4.12
MADCITY	MAD202084	22100000338	Madera	Purchase 1 New CNG Transit Bus	Fleet Conversion	\$170,000	2.10
MADCITY	MAD202087	22100000341	Madera	Purchase 1 New CNG Transit Bus	Fleet Conversion	\$139,000	2.10
MADCITY	MAD213096	22100000328	Madera	Purchase 2 MAX Buses	Fleet Conversion	\$270,000	2.10
MADCITY	MAD213097	22100000329	Madera	Purchase 1 DAR Bus	Fleet Conversion	\$115,000	2.10
MADCITY	MAD213099	22100000348	Madera	Purchase 2 MAX Buses	Fleet Conversion	\$420,000	2.10
MADCITY	MAD213100	22100000349	Madera	Purchase 1 DAR Bus	Fleet Conversion	\$149,000	2.10
MADCITY	MAD213101	22100000350	Madera	Purchase 1 DAR Bus	Fleet Conversion	\$171,000	2.10
MADCITY	MAD213102	22100000351	Madera	Purchase 1 MAX Bus	Fleet Conversion	\$220,000	2.10
MADCITY	MAD213103	22100000352	Madera	Purchase 1 MAX Bus	Fleet Conversion	\$253,000	2.10

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## **Air Quality Exempt Codes**

### **EPA Tables 2 & 3 – Exempt Category**

1.01	Safety – Railroad / Highway crossing
1.02	Safety – Hazard Elimination Program
1.03	Safety – Safer non-Federal-aid system roads
1.04	Safety – Shoulder improvements
1.05	Safety – Increasing sight distances
1.06	Safety – Safety Improvement Program
1.07	Safety – Non-signalization traffic control and operating
1.08	Safety – Railway / Highway crossing warning devices
1.09	Safety – Guardrails, median barriers, crash cushions
1.10	Safety – Pavement resurfacing and / or rehabilitation
1.11	Safety – Pavement marking demonstration
1.12	Safety – Emergency Relief (23 U.S.C. 125)
1.13	Safety - Fencing
1.14	Safety – Skid treatments
1.15	Safety – Safety roadside rest areas
1.16	Safety – Adding medians
1.18	Safety – Lighting improvements
1.19	Safety – Non-capacity widening or bridge reconstruction
1.20	Safety – Emergency truck pullovers
2.01	Mass Transit – Transit operating assistance
2.02	Mass Transit – Purchase of support vehicles
2.03	Mass Transit – Rehabilitation of transit vehicles
2.04	Mass Transit – Purchase of equipment for existing facilities
2.05	Mass Transit – Purchase of vehicle operating equipment
2.06	Mass Transit – Power, signal, and communications system
2.07	Mass Transit – Construction of small passenger shelters
2.08	Mass Transit – Reconstruction of transit structures
2.09	Mass Transit – Track rehab in existing right of way
2.10	Mass Transit – Purchase new buses and rail cars to replace
2.11	Mass Transit – Construction of new bus or rail storage / maintenance facilities
3.01	Air Quality – Ride sharing and van pooling program
3.02	Air Quality – Bicycle and Pedestrian facilities
4.01	Other – Non-construction related activities
4.05	Other – Engineering studies
4.06	Other – Noise attenuation
4.07	Other – Advance land acquisitions
4.08	Other – Acquisition of scenic easements
4.09	Other – Plantings, landscaping, etc.
4.10	Other – Sign Removal
4.11	Other – Directional and informational signs
4.13	Other – Damage repair caused by unusual disasters
5.01	Other – Intersection channelization projects
5.02	Other – Intersection signalization projects
5.03	Other – Changes in vertical and horizontal alignment
5.04	Other – Interchange reconfiguration projects
5.05	Other – Truck size and weight inspection stations
5.06	Other – Bus terminals and transfer points
5.07	Other – Traffic signal synchronization projects

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*MCTC*

*Conformity Analysis for 2019 FTIP and  
2018 RTP*

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## **APPENDIX C**

### **CONFORMITY ANALYSIS DOCUMENTATION**



EMFAC Emissions (tons/day)												
MADERA												
Pollutant	Source	Description										
1997 Ozone	EMFAC 2014 (Summer Run)	ROG Total Exhaust (All Vehicles Total)			2020	2023				2031	2037	2042
					1.40	1.06				0.72	0.59	0.53
		Conformity Total			1.40	1.10				0.70	0.60	0.50
1997 Ozone	EMFAC 2014 (Summer Run)	NOx Total Exhaust (All Vehicles Total)			4.02	2.25				1.63	1.50	1.49
		Conformity Total			4.00	2.30				1.60	1.50	1.50
Note: State control measures (RFG, Moyer, AB1493 and Smog Check) have been incorporated in EMFAC2014. Rule 9310 and 9410 are not included in this conformity analysis.												
2008 Ozone	EMFAC 2014 (Summer Run)	ROG Total Exhaust (All Vehicles Total)		2018	2021	2024		2027	2030	2031	2037	2042
				1.59	1.23	0.99		0.86	0.76	0.72	0.59	0.53
		Conformity Total		1.60	1.30	1.00		0.90	0.80	0.80	0.60	0.60
2008 Ozone	EMFAC 2014 (Summer Run)	NOx Total Exhaust (All Vehicles Total)		4.46	3.44	2.12		1.86	1.68	1.63	1.50	1.49
		Conformity Total		4.50	3.50	2.20		1.90	1.70	1.70	1.60	1.50
PM-10	EMFAC 2014 (Annual Run)	PM-10 Total (All Vehicles Total) * includes tire & brake wear			2020			2027			2035	2042
					0.34			0.32			0.34	0.36
		Conformity Total			0.34			0.32			0.34	0.36
PM-10	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)			4.21			1.94			1.61	1.54
		Conformity Total			4.21			1.94			1.61	1.54
PM2.5 Annual (1997 and 2012 standards)	EMFAC 2014 (Annual Run)	PM2.5 Total Exhaust (All Vehicles Total) * includes tire & brake wear			2021			2027			2035	2042
					0.14			0.13			0.14	0.15
		Conformity Total			0.10			0.10			0.10	0.10
PM2.5 Annual (1997 and 2012 standards)	EMFAC 2014 (Annual Run)	NOx Total Exhaust (All Vehicles Total)			3.61			1.94			1.61	1.54
		Conformity Total			3.60			1.90			1.60	1.50
PM2.5 24-hour (2006 standard)	EMFAC 2014 (Winter Run)	PM2.5 Total Exhaust (All Vehicles Total) * includes tire & brake wear		2019				2027			2035	2042
				0.15				0.13			0.14	0.15
		Conformity Total		0.20				0.10			0.10	0.10
PM2.5 24-hour (2006 standard)	EMFAC 2014 (Winter Run)	NOx Total Exhaust (All Vehicles Total)		4.57				1.99			1.65	1.58
		Conformity Total		4.60				2.00			1.60	1.60

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Paved Road Dust Emissions (tons/day)												
MADERA 2020												
			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control- Adjusted Emissions			
Enter Freeway VMT ==>	Freeway	1,896,942	692	52,904	51,336	0.141	0.075	0.130				
Enter Arterial VMT ==>	Arterial	2,901,441	1,059	134,653	130,661	0.358	0.282	0.257				
Enter Collector VMT ==>	Collector	210,563	77	9,772	9,482	0.026	0.407	0.015				
	Urban	38,442	14	13,366	12,969	0.036	0.324	0.024				
Enter Total of Urban and Rural Local VMT Here ==>	Rural	104,465	38	157,116	152,458	0.418	0.090	0.380				
	142,907											
	Totals	5,151,853	1,880	367,812	356,907	0.978		0.807				
MADERA 2027												
			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control- Adjusted Emissions			
Enter Freeway VMT ==>	Freeway	2,052,742	749	57,250	55,552	0.152	0.075	0.141				
Enter Arterial VMT ==>	Arterial	2,701,197	986	125,360	121,643	0.333	0.282	0.239				
Enter Collector VMT ==>	Collector	213,778	78	9,921	9,627	0.026	0.407	0.016				
	Urban	39,479	14	13,726	13,319	0.036	0.324	0.025				
Enter Total of Urban and Rural Local VMT Here ==>	Rural	107,284	39	161,356	156,572	0.429	0.090	0.390				
	146,763											
	Totals	5,114,480	1,867	367,613	356,714	0.977		0.811				
MADERA 2035												
			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control- Adjusted Emissions			
Enter Freeway VMT ==>	Freeway	2,218,850	810	61,882	60,048	0.165	0.075	0.152				
Enter Arterial VMT ==>	Arterial	3,056,310	1,116	141,841	137,635	0.377	0.282	0.271				
Enter Collector VMT ==>	Collector	248,767	91	11,545	11,203	0.031	0.407	0.018				
	Urban	37,830	14	13,153	12,763	0.035	0.324	0.024				
Enter Total of Urban and Rural Local VMT Here ==>	Rural	102,803	38	154,616	150,032	0.411	0.090	0.374				
	140,633											
	Totals	5,664,560	2,068	383,037	371,681	1.018		0.839				
MADERA 2042												
			VMT Daily	VMT (million/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control- Adjusted Emissions			
Enter Freeway VMT ==>	Freeway	2,444,531	892	68,176	66,155	0.181	0.075	0.168				
Enter Arterial VMT ==>	Arterial	3,222,767	1,176	149,566	145,131	0.398	0.282	0.285				
Enter Collector VMT ==>	Collector	266,658	97	12,375	12,008	0.033	0.407	0.020				
	Urban	40,189	15	13,973	13,559	0.037	0.324	0.025				
Enter Total of Urban and Rural Local VMT Here ==>	Rural	109,212	40	164,256	159,386	0.437	0.090	0.397				
	149,401											
	Totals	6,083,357	2,220	408,346	396,240	1.086		0.895				
DO NOT CHANGE ANY ITEMS BELOW THIS LINE												
MADERA						Road Type	Base EF (lb PM10/ VMT)					
HPMS Local Urban/Rural Percent From 1998 Assembly of Statistical Reports - Caltrans 26.9% Urban 73.1% Rural 100.0% Total						Freeway	0.000152818					
						Arterial	0.000254296					
						Collector	0.000254296					
						Local	0.00190513					
						Rural	0.008241141					
MADERA												
January	February	March	April	May	June	July	August	September	October	November	December	Total/Average
8.0	7.0	7.0	4.0	2.0	1.0	0	0	1.0	2.0	5.0	6.0	
31	28	31	30	31	30	31	31	30	31	30	31	
0.94	0.94	0.94	0.97	0.98	0.99	1.00	1.00	0.99	0.98	0.96	0.95	0.970351703
0.9												

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Unpaved Road Dust Emissions (tons/day)																			
MADERA 2020																			
		Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions										
	City/County	87.0	10	317.6	317.550	279.891	0.767	0.333	0.511										
MADERA 2027																			
		Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions										
	City/County	87.0	10	317.6	317.550	279.891	0.767	0.333	0.511										
MADERA 2035																			
		Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions										
	City/County	87.0	10	317.6	317.550	279.891	0.767	0.333	0.511										
MADERA 2042																			
		Miles	Vehicle Passes per Day	VMT (1000/year)	Base Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tpy)	Rain Adj. Emissions (PM10 tons/day)	District Rule 8061/ISR Control Rates	Control-Adjusted Emissions										
	City/County	87.0	10	317.6	317.550	279.891	0.767	0.333	0.511										

Road Construction Dust								
MADERA								
Description								
	2020		2027		2035		2042	
	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles	Year	Lane Miles
Baseline	2005	1599	2020	1654	2027	1742	2035	1917
Horizon	2020	1654	2027	1742	2035	1917	2042	1948
Difference	15	55	7	88	8	175	7	31
Lane Miles per Year		4		13		22		4
Acres Disturbed		14		49		85		17
Acre-Months		257		874		1530		310
Emissions (tons/year)		28.247		96.121		168.288		34.121
Annual Average Day Emissions (tons)		0.077		0.263		0.461		0.093
District Rule 8021 Control Rates		0.290		0.290		0.290		0.290
<b>Total Emissions (tons per day)</b>		<b>0.055</b>		<b>0.187</b>		<b>0.327</b>		<b>0.066</b>

**2018 RTP Conformity Results Summary -- MADERA**

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
1997 Ozone*	2020 Budget	1.6	4.5		
	2020	1.4	4.0	YES	YES
	2023 Budget	1.3	2.7		
	2023	1.1	2.3	YES	YES
	2031	0.7	1.6	YES	YES
	2037	0.6	1.5	YES	YES
	2042	0.5	1.5	YES	YES

\*1997 Ozone conformity is included due to uncertainty associated with an ongoing litigation related to EPA's revocation of the 1997 ozone standard.

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
		ROG (tons/day)	NOx (tons/day)	ROG	NOx
2008 Ozone	2018 Budget	1.9	5.1		
	2018	1.6	4.5	YES	YES
	2021 Budget	1.5	4.1		
	2021	1.3	3.5	YES	YES
	2024 Budget	1.2	2.6		
	2024	1.0	2.2	YES	YES
	2027 Budget	1.1	2.3		
	2027	0.9	1.9	YES	YES
	2030 Budget	0.9	2.0		
	2030	0.8	1.7	YES	YES
	2031 Budget	0.9	2.0		
	2031	0.8	1.7	YES	YES
	2037	0.6	1.6	YES	YES
	2042	0.6	1.5	YES	YES

*Conformity Analysis for 2019 FTIP and  
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Standard	Analysis Year	Emissions Total		DID YOU PASS?	
PM-10		PM-10 (tons/day)	NOx (tons/day)	PM-10	NOx
	2020 Budget	2.5	4.7		
	2020	1.7	4.2	YES	YES
	2020 Budget	2.5	4.7		
	2027	1.8	1.9	YES	YES
	2020 Budget	2.5	4.7		
	2035	2.0	1.6	YES	YES
	2020 Budget	2.5	4.7		
	2042	1.8	1.5	YES	YES
Standard	Analysis Year	Emissions Total		DID YOU PASS?	
1997 24-Hour and 1997 & 2012 Annual PM2.5 Standards		PM2.5 (tons/day)	NOx (tons/day)	PM2.5	NOx
	2014 Budget	0.3	8.1		
	2021	0.1	3.6	YES	YES
	2014 Budget	0.3	8.1		
	2027	0.1	1.9	YES	YES
	2014 Budget	0.3	8.1		
	2035	0.1	1.6	YES	YES
	2014 Budget	0.3	8.1		
	2042	0.1	1.5	YES	YES

*Conformity Analysis for 2019 FTIP and  
2018 RTP*

Standard	Analysis Year	Emissions Total		DID YOU PASS?	
<b>2006 PM2.5 Winter 24- Hour Standard</b>		<b>PM2.5 (tons/day)</b>	<b>NOx (tons/day)</b>	<b>PM2.5</b>	<b>NOx</b>
	2017 Budget	0.2	6.0		
	2019	0.2	4.6	<b>YES</b>	<b>YES</b>
	2017 Budget	0.2	6.0		
	2027	0.1	2.0	<b>YES</b>	<b>YES</b>
	2017 Budget	0.2	6.0		
	2035	0.1	1.6	<b>YES</b>	<b>YES</b>
	2017 Budget	0.2	6.0		
	2042	0.1	1.6	<b>YES</b>	<b>YES</b>

<b>PM-10</b>	Total On-Road Exhaust		Paved Road Dust		Unpaved Road Dust		Road Construction Dust		Total	
	PM-10	Nox	PM-10	Nox	PM-10	Nox	PM-10	Nox	PM-10	Nox
2020	0.342	4.212	0.807		0.511		0.055		<b>1.7</b>	<b>4.2</b>
2027	0.318	1.936	0.811		0.511		0.187		<b>1.8</b>	<b>1.9</b>
2035	0.342	1.613	0.839		0.511		0.327		<b>2.0</b>	<b>1.6</b>
2042	0.363	1.545	0.895		0.511		0.066		<b>1.8</b>	<b>1.5</b>

**APPENDIX D**

**TIMELY IMPLEMENTATION DOCUMENTATION FOR  
TRANSPORTATION CONTROL MEASURES**



<u>RACM Commitment</u>	<u>Agency</u>	<u>Commitment Description</u>	<u>Commitment Schedule</u>	<u>Commitment Funding</u>	<u>Project Description</u>	<u>Implementation Status</u>  (as of December 2017)	<u>2019 FTIP Conformity Update</u>  (as of June 2018)
MA 3.1	MCTC	Commute Solutions		Funding is allocated through the annual budget process.	MCTC agrees to act as an information resource for employers within Madera County for the Commute Solutions Program. MCTC will promote the program by providing information to employers with fifty or greater employees on an annual basis.	The Commute Solutions Program is not programmed in the TIP. MCTC expanded our efforts through the newsletter, which has regular articles documenting the benefits of alternative commuting methods. MCTC continues to provide commute solutions information through the Public Awareness Program. In November of 2010 MCTC joined the California Vanpool Authority as a sponsor of the CalVans program.	MCTC continues to provide commute solutions information through the Public Awareness Program.
MA 14.1 (MA 11.2, MA 11.6, MA 13.3, 13.4, TCM3, )	MCTC	Area wide Public Awareness Programs		Funding is allocated through the annual budget process and documented in MCTC's OWP. \$40,000 will be budgeted for the first year of implementation.	MCTC agrees to expand public outreach by implementation of this measure through a new work element entitled "Public Awareness Program." This program will be developed during the first year of implementation and will include the following activities: Development of public outreach tools (i.e., website, newsletter, etc.); Rideshare promotion; Providing resources for the Commute Solutions program to employers; Promotion of alternative modes of transportation (i.e., bicycle, pedestrian, transit, and rail); Encouraging telecommuting and the use of teleconferencing; Encouraging other emission reduction behavior modifications (i.e., voluntary limiting of idling, engine retrofits, and implementation of incentive programs). This measure is an expansion of previous accomplishments through participation in the Rideshare Program with COFCG.	Public awareness programs are not programmed in the TIP. MCTC expanded public outreach by developing a newsletter and website. MCTC developed a Public Participation Plan, which was approved in May 2004 and last updated in June of 2015. The MCTC Public Awareness Program is an ongoing annual program.	The MCTC Public Awareness Program is an ongoing annual program. MCTC staff engages with the public verbally, in writing, through social media and electronic mailings.
MA 5.2	City of Madera	Cleveland Avenue	not specified	not specified	In City of Madera; reconstruct & widen existing 2 lane street to provide raised median, bike lane, sidewalks, & install 2 traffic signals.	The City of Madera reviews its signal systems (4 or more contiguous in accordance with the FTIP CMAQ programming cycle). Signal coordination is not warranted on Cleveland Ave. at this time.	The City of Madera reviews its signal systems (4 or more contiguous in accordance with the FTIP CMAQ programming cycle). Signal coordination is not warranted on Cleveland Ave. at this time.
		Gateway Drive: coordinate five signals	not specified	not specified	In Madera, Gateway Drive from 4th Street to Olive Avenue: signal coordination	Project Completed November 2005.	Complete
MA 5.9	City of Madera	Bus Pullouts in Curbs for passenger Loading	31-Mar-02	Funding is allocated through the annual budget process and through the regular project programming cycle	Bus pullout project scheduled at intersection of W. Cleveland and N. Schnoor Avenues.	This project was not included in the TIP. The bus pullout project on the N.W. corner of Cleveland and Schnoor was locally funded and completed in June 2002.	Complete

ADDITIONAL PROJECTS IDENTIFIED							
MA3.5	MCTC	Preferential Parking for Carpools and Vanpools		Funding is allocated through the annual budget process.	Encourage the establishment of preferential parking for carpools and vanpools annually	The Preferential Parking Outreach Program is not programmed in the TIP. The MCTC website has featured articles documenting the benefits of alternative commuting methods. MCTC continues to provide Preferential Parking; Vanpool; and Carpool information through the Public Awareness Program.	MCTC continues to provide Preferential Parking; Vanpool; and Carpool information through the Public Awareness Program.
MA3.9	MCTC	Encourage merchants and employers to subsidize the cost of transit for employees		Funding is allocated through the annual budget process.	Provide outreach services annually	The Preferential Parking Outreach Program is not programmed in the TIP. The MCTC website has featured articles documenting the benefits of alternative commuting methods. MCTC continues to provide Preferential Parking; Vanpool; and Carpool information through the Public Awareness Program.	MCTC continues to provide Transit Subsidy Information through the Public Awareness Program. In November of 2010 MCTC joined the California Vanpool Authority as a sponsor of the CalVans program.
MA5.3	City of Chowchilla	Reduce Traffic Congestion at Major Intersections		Local	Installed traffic signal at intersection of Robertson Blvd/SR 233 and 11th Street.	Project Completed Summer 2007	Complete
MA9.3	City of Chowchilla	Bicycle/Pedestrian Program		Local	In Chowchilla, Class II Bike lane on Avenue 26 from Road 16 1/2 to Fig Tree Road	Project Completed September 2002	Complete
MA5.3	Madera County	Reduce Traffic Congestion at Major Intersections		Local	In Coarsegold, Installed traffic signal at Chukchansi Casino	Project Completed in 2002	Complete
				Local	In Madera Ranchos, Installed traffic signal at Road 36/Avenue 12	Project Completed in 2002.	Complete
				Local	In Oakhurst, Installed traffic signal at Road 427/Road 426	Project Completed in 2002.	Complete
				Local	Installed traffic signal at Road 200/SR 41	Project Completed November 2007.	Complete
				SHOPP	Installed traffic signals at SR 99/Ave 12	Project Completed in 2009.	Complete
				SHOPP	Installed traffic signal at SR 41/Yosemite Springs Parkway	Project Completed in May 2009	Complete
				HSIP	Installed traffic signal at Lanes Bridge Dr./Childrens Blvd	Project Completed August 2009.	Complete
				Local	Installed traffic signal at SR 41/Road 415	Project Completed September 2009.	Complete
				Local	Installed traffic signal and right through lane at SR 41/Road 200	Project Completed in 2010	Complete
				Local	Installed traffic signal at Avenue 12 and Road 36	Project Completed in 2011	Complete
				Local	Installed Signal in Madera County at Avenue 12 overcrossing	Project Completed in 2010	Complete
				Local	Installed Signal in Madera County just west of Avenue 12 overcrossing	Project Completed in 2013	Complete
				Local	Installed Signal in Madera County at Janes Rd and Children's Blvd	Project Completed in 2012	Complete
				Local	Install dual left turn lanes on Cleveland at Schnoor	Project Completed in 2017	Complete
				Local	Installed traffic signal at Road 36 and Ave 12.5	Project Completed in 2016	Complete
				Local	Installed signal at Childrens Blvd and Peck Ave	Project Completed in 2017	Complete
MA9.3	Madera County	Bicycle/Pedestrian Program		Local	Class II bicycle lanes on Road 427	Project Completed July 2002	Complete
				Local	In Oakhurst, Constructed sidewalks on SR41	Project Completed January 2003	Complete
				Local	Constructed sidewalks on Road 26 at Ave 17	Project Completed January 2004	Complete
				Local	Class II Bicycle Lanes on RD 26 from Madera city limits to Ave 17	Project Completed November 2005	Complete
				Local	Constructed sidewalks on Road 36 at Ave 12	Project Completed September 2006	Complete
				Local	Class II Bicycle Lanes on Road 36 North of Ave 12	Project Completed September 2006	Complete
				Local	Constructed Bicycle Lanes and Pedestrian Walkways at Desmond and Nishimoto Schools in Madera county	Project Completed in 2011	Complete
				Local	In Oakhurst, Constructed sidewalks on Road 426	Project Completed in 2013	Complete
MA5.3	City of Madera	Reduce Traffic Congestion at Major Intersections		Local	In Madera, Installed traffic signal at Olive/Gateway	Project Completed June 2002	Complete
				Local	In Madera, Installed traffic signal at Olive/Stadium	Project Completed February 2004	Complete
				Local	In Madera, Installed traffic signal at Schnoor/Foxglove	Project Completed June 2004	Complete
				Local	In Madera, Installed traffic signal at Schnoor/Sunset		Complete
				Local	In Madera, traffic signal modifications at Stadium Rd./Pecan Ave.	Project Completed September 2008	Complete
				Local	In Madera, Installed traffic signal at Raymond Rd/Cleveland Ave.	Project Completed 2012	Complete
				Local	In Madera, Installed double left turn lanes at Cleveland and Schnoor	Project Completed 2013	Complete
MA9.3	City of Madera	Bicycle/Pedestrian Program		Local	Class I Bike Path- Fresno River Trail - Schnoor to Granada	Project completed in 2002	Complete
				Local	Class I Bike Path- Fresno River Trail - Granada to Westberry	Project completed in 2005	Complete
				Local	Class II Bike Lane - Cleveland Ave from Sharon to Raymond	Project completed in 2005	Complete
				Local	Class II Bike Lane - Stadium Road n/o Pecan	Project completed in 2005	Complete
				Local	Fresno River Trail Undercrossing at D & Lake Street	Project completed August 2008	Complete
				Local	Fresno River Trail Bike and Pedestrian Trail; Calss 1 Bike and Undercrossing	Project completed in 2010	Complete
				Local	Schnoor Bridge Fresno River Trailer	Project completed in 2012	Complete
				Local	Fresno River Trail Bike and Pedestrian Trail; Calss 1 Schnoor to North Bank	Project completed in 2017	Complete

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*MCTC*

*Conformity Analysis for 2019 FTIP and  
2018 RTP*

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## **APPENDIX E**

### **PUBLIC MEETING PROCESS DOCUMENTATION**

**NOTICE OF PUBLIC HEARING ON THE REVISIONS TO THE  
DRAFT CONFORMITY ANALYSIS FOR THE DRAFT 2019 FEDERAL TRANSPORTATION  
IMPROVEMENT PROGRAM AND DRAFT 2018 REGIONAL TRANSPORTATION  
PLAN/SUSTAINABLE COMMUNITY STRATEGY**

NOTICE IS HEREBY GIVEN that the Madera County Transportation Commission (MCTC) will hold a public hearing on September 19, 2018 at 3:00 P.M. during the MCTC Policy Board Meeting at the MCTC office building at 2001 Howard Rd. Madera, California 93637 regarding the revisions to the Draft Air Quality Conformity Analysis for the 2019 FTIP and 2018 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS). The purpose of the public hearing is to receive public comments on the following document:

- The Draft Conformity Analysis for the 2019 FTIP and 2018 RTP/SCS is being revised to present data more consistently with the DRAFT 2018 RTP/SCS and DRAFT 2019 FTIP.
- The Draft Conformity Analysis contains the documentation to support a finding that the 2019 FTIP and 2018 RTP/SCS meet the air quality conformity requirements for ozone and particulate matter.

The Draft Conformity Analysis, hereby noticed, supersedes the version released for public review and comment on June 21, 2018.

Individuals with disabilities may call MCTC (with 3-working-day advance notice) to request auxiliary aids necessary to participate in the public hearing. Translation services are also available (with 3-working-day advanced notice) to participants speaking any language, by available professional translation services.

A 30-day public review and comment period on the Draft Conformity Analysis will commence on August 16, 2018 and conclude on September 17, 2018. The draft document is available for review at the MCTC office, located at 2001 Howard Rd. Madera, California 93637 and on MCTC website at [www.maderactc.org](http://www.maderactc.org).

Public comments are welcomed at the hearing, or may be submitted in writing by 5:00 P.M. on September 17, 2018 to Dylan Stone at the address below.

After considering the comments, the documents will be considered for adoption, by resolution, by the MCTC Policy Board at a regularly scheduled meeting to be held on September 19, 2018. The documents will then be submitted to state and federal agencies for consideration and potential approval.

Contact Person: Dylan Stone, Regional Planning Supervisor  
2001 Howard Road, Suite 201  
Madera, CA 93637  
(559) 675-0721

**AVISO DE AUDIENCIA PÚBLICA PARA LAS REVISIONES DEL BORRADOR DE  
ANÁLISIS DE CONFORMIDAD PARA EL BORRADOR DEL PROGRAMA FEDERAL DE  
MEJORAS DE TRANSPORTE 2019 Y EL BORRADOR DEL PLAN DE TRANSPORTE  
REGIONAL 2018/ESTRATEGIA DE COMUNIDADES SOSTENIBLES**

POR LA PRESENTE SE NOTIFICA que la Comisión de Transporte del Condado de Madera (MCTC, por sus siglas en inglés) llevará a cabo una audiencia pública el 19 de Septiembre de 2018 a las 3:00 P.M. durante la Junta Directiva de MCTC en las oficinas de MCTC localizadas en 2001 Howard Road, Suite 201, Madera, CA 93637 con respecto a las revisiones hechas al Borrador de Análisis de la Conformidad de la Calidad del Aire para el Programa Federal de Mejoras de Transporte 2019 (2019 FTIP) y para el Plan de Transporte Regional 2018/Estrategia de Comunidades Sostenibles (2018 RTP/SCS, por sus siglas en inglés). El objetivo de la audiencia pública es recibir comentarios públicos sobre estos documentos:

- El Borrador del Análisis de Conformidad para el 2019 FTIP y 2018 RTP/SCS se está revisando para presentar datos de manera más consistente con el BORRADOR del 2018 RTP/SCS y el BORRADOR del 2019 FTIP.
- El Borrador de Análisis de Conformidad contiene la documentación para respaldar el hallazgo de que el 2019 FTIP y el 2018 RTP/SCS cumplen con los requisitos de conformidad de calidad del aire para el ozono y las partículas.

El Borrador del Análisis de Conformidad, notado por la presente, reemplaza la versión publicada para revisión pública y comentarios el 21 de junio de 2018.

Las personas con discapacidades pueden llamar a MCTC (con preaviso de tres (3) días laborables) para solicitar las ayudas auxiliares necesarias para participar en la audiencia pública. Servicios de traducción profesional estarán disponibles (con un preaviso de 3 días laborables) para los participantes que hablen cualquier idioma.

Un período de 30 días de revisión pública y comentarios sobre el Borrador de Análisis de Conformidad comenzará el 16 de agosto de 2018 y concluirá el 17 de septiembre de 2018. El borrador del documento está disponible para su revisión en la oficina de MCTC, ubicada en 2001 Howard Rd. Madera, California 93637 y en el sitio web de MCTC en [www.maderactc.org](http://www.maderactc.org).

Los comentarios públicos son bienvenidos en la audiencia o pueden enviarse por escrito a la dirección que se encuentra a continuación antes de las 5:00 p.m. el 17 de Septiembre de 2018 a Dylan Stone a la dirección a continuación.

Después de considerar los comentarios, la Junta Directiva de MCTC considerará la adopción de los documentos por resolución en una reunión programada regularmente que se celebrará el 19 de Septiembre de 2018. Los documentos se presentarán a las agencias estatales y federales para su consideración y potencial aprobación.

Persona a Contactar:

Dylan Stone, Supervisor de Planificación Regional  
2001 Howard Road, Suite 201  
Madera, CA 93637  
(559) 675-0721  
[dylan@maderactc.org](mailto:dylan@maderactc.org)

Notice Type : [Public Notice](#)

Posting Date : 8/16/2018

[Printer Friendly](#)

#3808695 NOTICE OF PUBLIC HEARING ON THE REVISIONS TO THE DRAFT CONFORMITY ANALYSIS FOR THE DRAFT 2019 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM AND DRAFT 2018 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITY STRATEGY NOTICE IS HEREBY GIVEN that the Madera County Transportation Commission (MCTC) will hold a public hearing on September 19, 2018 at 3:00 P.M. during the MCTC Policy Board Meeting at the MCTC office building at 2001 Howard Rd. Madera, California 93637 regarding the revisions to the Draft Air Quality Conformity Analysis for the 2019 FTIP and 2018 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS). The purpose of the public hearing is to receive public comments on the following document: The Draft Conformity Analysis for the 2019 FTIP and 2018 RTP/SCS is being revised to present data more consistently with the DRAFT 2018 RTP/SCS and DRAFT 2019 FTIP. The Draft Conformity Analysis contains the documentation to support a finding that the 2019 FTIP and 2018 RTP/SCS meet the air quality conformity requirements for ozone and particulate matter. The Draft Conformity Analysis, hereby noticed, supersedes the version released for public review and comment on June 21, 2018. Individuals with disabilities may call MCTC (with 3-working-day advance notice) to request auxiliary aids necessary to participate in the public hearing. Translation services are also available (with 3-working-day advanced notice) to participants speaking any language, by available professional translation services. A 30-day public review and comment period on the Draft Conformity Analysis will commence on August 16, 2018 and conclude on September 17, 2018. The draft document is available for review at the MCTC office, located at 2001 Howard Rd. Madera, California 93637 and on MCTC website at [www.maderactc.org](http://www.maderactc.org). Public comments are welcomed at the hearing, or may be submitted in writing by 5:00 P.M. on September 17, 2018 to Dylan Stone at the address below. After considering the comments, the documents will be considered for adoption, by resolution, by the MCTC Policy Board at a regularly scheduled meeting to be held on September 19, 2018. The documents will then be submitted to state and federal agencies for consideration and potential approval. Contact Person: Dylan Stone, Regional Planning Supervisor 2001 Howard Road, Suite 201 Madera, CA 93637 (559) 675-0721

Notice Type : [Public Notice](#)

Posting Date : 8/16/2018

[Printer Friendly](#)

#3808737 AVISO DE AUDIENCIA PÚBLICA PARA LAS REVISIONES DEL BORRADOR DE ANALISIS DE CONFORMIDAD PARA EL BORRADOR DEL PROGRAMA FEDERAL DE MEJORAS DE TRANSPORTE 2019 Y EL BORRADOR DEL PLAN DE TRANSPORTE REGIONAL 2018/ESTRATEGIA DE COMUNIDADES SOSTENIBLES POR LA PRESENTE SE NOTIFICA que la Comisión de Transporte del Condado de Madera (MCTC, por sus siglas en inglés) llevará a cabo una audiencia pública el 19 de Septiembre de 2018 a las 3:00 P.M. durante la Junta Directiva de MCTC en las oficinas de MCTC localizadas en 2001 Howard Road, Suite 201, Madera, CA 93637 con respecto a las revisiones hechas al Borrador de Análisis de la Conformidad de la Calidad del Aire para el Programa Federal de Mejoras de Transporte 2019 (2019 FTIP) y para el Plan de Transporte Regional 2018/Estrategia de Comunidades Sostenibles (2018 RTP/SCS, por sus siglas en inglés). El objetivo de la audiencia pública es recibir comentarios públicos sobre estos documentos: El Borrador del Análisis de Conformidad para el 2019 FTIP y 2018 RTP/SCS se está revisando para presentar datos de manera más consistente con el BORRADOR del 2018 RTP/SCS y el BORRADOR del 2019 FTIP. El Borrador de Análisis de Conformidad contiene la documentación para respaldar el hallazgo de que el 2019 FTIP y el 2018 RTP/SCS cumplen con los requisitos de conformidad de calidad del aire para el ozono y las partículas. El Borrador del Análisis de Conformidad, notado por la presente, reemplaza la versión publicada para revisión pública y comentarios el 21 de junio de 2018. Las personas con discapacidades pueden llamar a MCTC (con preaviso de tres (3) días laborables) para solicitar las ayudas auxiliares necesarias para participar en la audiencia pública. Servicios de traducción profesional están disponibles (con un preaviso de 3 días laborables) para los participantes que hablen cualquier idioma. Un periodo de 30 días de revisión pública y comentarios sobre el Borrador de Análisis de Conformidad comenzará el 16 de agosto de 2018 y concluirá el 17 de septiembre de 2018. El borrador del documento está disponible para su revisión en la oficina de MCTC, ubicada en 2001 Howard Rd. Madera, California 93637 y en el sitio web de MCTC en [www.maderactc.org](http://www.maderactc.org). Los comentarios públicos son bienvenidos en la audiencia o pueden enviarse por escrito a la dirección que se encuentra a continuación antes de las 5:00 p.m. el 17 de Septiembre de 2018 a Dylan Stone a la dirección a continuación. Después de considerar los comentarios, la Junta Directiva de MCTC considerará la adopción de los documentos por resolución en una reunión programada regularmente que se celebrará el 19 de Septiembre de 2018. Los documentos se presentarán a las agencias estatales y federales para su consideración y potencial aprobación. Persona a Contactar: Dylan Stone, Supervisor de Planificación Regional 2001 Howard Road, Suite 201 Madera, CA 93637 (559) 675-0721 [dylan@maderactc.org](mailto:dylan@maderactc.org)

1 BEFORE  
2 THE COMMISSIONERS OF THE MADERA COUNTY TRANSPORTATION COMMISSION  
3 COUNTY OF MADERA, STATE OF CALIFORNIA  
4  
5  
6

7 In the matter of )  
8 **RESOLUTION ADOPTING THE 2019 FTIP)**  
9 **AND THE CORRESPONDING )**  
10 **AIR QUALITY CONFORMITY ANALYSIS )**  
11

Resolution No. **18-18**

12  
13 **WHEREAS**, the Madera County Transportation Commission (MCTC) is a Regional  
14 Transportation Planning Agency and a Metropolitan Planning Organization, pursuant to State and Federal  
15 designation; and  
16

17 **WHEREAS**, federal planning regulations require that Metropolitan Planning Organizations  
18 prepare and adopt a short range Federal Transportation Improvement Program (FTIP) for their region; and  
19

20 **WHEREAS**, the 2019 Federal Transportation Improvement Program (2019 FTIP) has been  
21 prepared to comply with Federal and State requirements for local projects and through a cooperative process  
22 between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State  
23 Department of Transportation (Caltrans), principal elected officials of general purpose local governments  
24 and their staffs, and public owner operators of mass transportation services acting through the Madera  
25 County Transportation Commission forum and general public involvement; and  
26

27 **WHEREAS**, the 2019 FTIP program listing is consistent with: 1) the 2018 Regional  
28 Transportation Plan/Sustainable Communities Strategy (RTP/SCS), 2) the 2018 State Transportation  
29 Improvement Program; and 3) the Corresponding Conformity Analysis; and  
30

31 **WHEREAS**, the 2019 FTIP contains the MPO's certification of the transportation planning  
32 process assuring that all federal requirements have been fulfilled; and  
33

34 **WHEREAS**, the 2019 FTIP meets all applicable transportation planning requirements per 23  
35 Code of Federal Regulations (CFR) Part 450; and  
36

37 **WHEREAS**, MCTC has established performance targets that address the performance standards  
38 per 23 CFR Part 490, 49 United States Code (U.S.C.) 5326(c), and 49 U.S.C. 5329(d) to use in tracking  
39 progress toward attainment of critical outcomes for the region of the MPO; and  
40

41 **WHEREAS**, MCTC has integrated into its metropolitan transportation planning process, directly or  
42 by reference, the goals, objectives, performance measures, and targets described in other State transportation  
43 plans and transportation processes, as well as any plans developed under 49 U.S.C. Chapter 53 by providers  
44 of public transportation, required as part of a performance-based program; and  
45

46 **WHEREAS**, projects submitted in the 2019 FTIP must be financially constrained and the financial  
47 plan affirms that funding is available; and  
48

49 **WHEREAS**, the MPO must demonstrate conformity per 40 CFR Part 93 for the 2019 FTIP and  
50 2018 RTP; and  
51

**WHEREAS**, the 2019 FTIP and 2018 RTP includes a new Conformity Analysis; and

**WHEREAS**, the 2019 FTIP and 2018 RTP conforms to the applicable SIPs; and

**WHEREAS**, the 2019 FTIP and 2018 RTP do not interfere with the timely implementation of the Transportation Control Measures; and

**WHEREAS**, the documents have been widely circulated and reviewed by MCTC advisory committees representing the technical and management staffs of the member agencies; representatives of other governmental agencies, including State and Federal; representatives of special interest groups; representatives of the private business sector; and residents of Madera County consistent with public participation process adopted by MCTC; and

**WHEREAS**, the 2019 FTIP comment period was June 21, 2018 through July 24, 2018; and

**WHEREAS**, the revised corresponding Conformity Analysis for the 2019 FTIP and RTP/SCS comment period was August 16, 2018 through September 17, 2018; and

**WHEREAS**, a public hearing was conducted on July 18, 2018 to hear and consider comments on the 2019 FTIP and Corresponding Conformity Analysis; and

**WHEREAS**, a subsequent public hearing was conducted on September 19, 2018 to hear and consider comments on the revised Corresponding Conformity Analysis; and

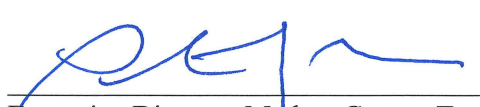
**NOW, THEREFORE, BE IT RESOLVED**, that MCTC adopts the 2019 FTIP and corresponding Conformity Analysis.

**BE IT FURTHER RESOLVED**, that the MCTC finds that the 2019 FTIP and 2018 RTP/SCS are in conformity with the requirements of the Federal Clean Air Act Amendments and applicable State Implementation Plans for air quality.

The foregoing resolution was adopted this 19th day of September, 2018 by the following vote:

Commissioner Frazier voted:	<u>Yes</u>
Commissioner Oliver voted:	<u>Yes</u>
Commissioner Medellin voted:	<u>Yes</u>
Commissioner Ahmed voted:	<u>Absent</u>
Commissioner Wheeler voted:	<u>Absent</u>
Commissioner Rodriguez voted:	<u>Yes</u>
A.H. Commissioner Paythress Voted:	<u>Yes</u>

  
Chairman, Madera County Transportation Commission

  
Executive Director, Madera County Transportation Commission



**APPENDIX F**

**RESPONSE TO PUBLIC COMMENTS**

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*MCTC*

*Conformity Analysis for 2019 FTIP and  
2018 RTP*

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September 17, 2018

**Sent Via Email [dylan@maderactc.org]**

Dylan Stone  
Regional Planning Supervisor  
Madera County Transportation Commission  
2001 Howard Road, Suite 201  
Madera, CA 93637

**Re: Draft Conformity Analysis For The 2019 Federal Transportation Improvement Program And 2018 Regional Transportation Plan**

We appreciate the opportunity to comment on the Draft Conformity Analysis referenced above. This letter follows and incorporates by reference the letter we submitted on July 24, 2018 on the Draft 2018 Regional Transportation Plan ("RTP") and Sustainable Communities Strategy ("SCS").<sup>1</sup>

As acknowledged in the Conformity Analysis, portions of Madera County are in extreme nonattainment for ozone, nonattainment for PM2.5 under federal and state standards, and nonattainment for PM10 under state standards. Given that air quality in the San Joaquin Valley already unacceptably poor, the residents of disadvantaged communities within Madera County have a significant interest in ensuring that new plans and projects do not adversely affect air quality in the County as a whole and that localized air quality impacts do not occur. Unfortunately, the Conformity Analysis does not demonstrate that the RTP/SCS is protective of air quality.

Pursuant to 42 U.S.C. § 7506(c)(1), "[n]o metropolitan planning organization designated under section 134 of title 23, United States Code, shall give its approval to any project, program, or plan which does not conform to an implementation plan approved or promulgated under section 110 [42 USCS § 7410]." Further, the "assurance of conformity" is an "affirmative responsibility" of MPOs. (*Id.*) In this context, "conformity" means:

- (A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

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<sup>1</sup> A copy of the July 24, 2018 letter is attached as Exhibit A for convenience.

- (B) that such activities will not--
  - (i) cause or contribute to any new violation of any standard in any area;
  - (ii) increase the frequency or severity of any existing violation of any standard in any area; or
  - (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

(*Id.*) The “determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel and congestion estimates as determined by the metropolitan planning organization or other agency authorized to make such estimates.” (*Id.*)

As an initial matter, to the extent that the assumptions and modeling supporting the draft RTP/SCS are unsupported or flawed, the Conformity Analysis fails for the same reasons. We noted several ways in which the 2018 RTP/SCS is based on unsupported assumptions in the July 24 letter, including but not limited to: (a) the RTP/SCS contains policies and funds projects in such a way that development in new communities is prioritized over development in existing communities, thereby increasing vehicle miles traveled and associated air quality impacts (Ex. A, pp. 11-12); (b) the RTP/SCS prioritizes road expansion while failing to acknowledge that road expansion is likely to increase rather than reduce VMTs (Ex. A, pp. 12-13); (c) the RTP/SCS dramatically underestimates the number of workers per household in the Southeast Growth Area and resulting air quality impacts from commuter VMTs (Ex. A, p. 15.); (d) the RTP/SCS underfunds active transportation and transit infrastructure and services (Ex. A, pp. 16-17); and (e) the RTP/SCS and supporting DEIR fail to properly acknowledge air quality impacts associated with construction and operation of road expansion projects (Ex. A, p. 22.)

Additionally, the Conformity Analysis does not demonstrate that it conforms with the “purpose of eliminating or reducing the severity and number of violations...and achieving expeditious attainment of such standards” as required by § 7506(c)(1)(A). MCTC does not discuss this as a separate requirement in its Analysis, though it stands apart from the requirements of subsection (B) quoted above, and does not contain a discussion of whether the RTP aids in attaining attainment as “expeditiously as practicable.” (*See* Conformity Analysis p. 10.) As discussed in our July 24 letter and above, the draft RTP/SCS at issue here contains many provisions that are likely to significantly increase VMTs and thus increase the severity and number of air quality violations. Of particular note is the fact that the RTP/SCS plans for a transportation system and development pattern that includes development of a new town in the Southeast Growth Area.

The RTP/SCS projects an increase in the Southeast Growth Area from 433 households in 2010 to 8,514 households in 2042. This is a substantial new population in a presently rural area that will generate significant commuter traffic and associated air quality impacts. The RTP/SCS does not contain adequate measures for transit from the area to job centers in the City of Madera and the City of Fresno.

The Conformity Analysis must also “discuss how transit operating policies (including fares and service levels) and assumed transit ridership have changed since the previous conformity determination” and “reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.” (40 C.F.R. 93.110(c), (d).) While the Analysis does discuss transit operating policies, the discussion is not complete and notably contains no discussion of changes in fares or service levels since the previous conformity determination (if any). To the extent that this data is built into the modeling, it must be discussed in the Analysis. (*Id.* [the analysis must “discuss” changes in transit operating policies and assumed transit ridership].)

Federal regulations require that “[k]ey assumptions shall be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by §93.105.” (40 C.F.R. § 93.110(f).) The draft Conformity Analysis contains no specified key assumptions, and the pages specified in Appendix A (pages 26-27) do not satisfy this requirement, discussing only data related to current transit services rather than changes that have occurred since the previous conformity determination.

Moreover, several issues appear to remain regarding transportation control measures (“TCMs”). The RTP/SCS must provide “for timely implementation of transportation control measures consistent with schedules included in the applicable implementation plan.” (42 U.S.C. § 7506(c)(2)(B).) This requirement is met where both of the following two conditions are demonstrated:

- (1) The transportation plan, in describing the envisioned future transportation system, provides for the timely completion or implementation of all TCMs in the applicable implementation plan which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws, consistent with schedules included in the applicable implementation plan.

- (2) Nothing in the transportation plan interferes with the implementation of any TCM in the applicable implementation plan.

(40 C.F.R. § 93.113(b).)

With respect to Ozone, the 2016 Ozone Plan, adopted by the San Joaquin Valley Air Pollution Control District on June 16, 2016, requires that MCTC implement the following TCMs: commute solutions, preferential parking for carpools and vanpools, encourage merchants and employers to subsidize the cost of transit for employees, encourage limitations on vehicle idling, promote use of Pony engines, telecommuting, teleconferencing, area-wide public awareness programs, and rideshare programs. (2016 Ozone Plan, Table D-13.) However, the Conformity Analysis states only that the 2007 and 2016 Ozone Plans do not “include new TCMs for the San Joaquin Valley.” This brief statement does not support the conclusion that the RTP plans implement all TCMs or that nothing in the RTP interferes with the implementation of any TCM.

The discussion in the Conformity Analysis related to PM10 and PM2.5 is similarly without substance. As the Analysis does not affirmatively demonstrate that the two conditions in 40 C.F.R. § 93.113(b) are met, it does not comply with Federal Regulations or the Clean Air Act. While Appendix D provides some relevant information, it does not discuss all applicable TCMs, or the impact of the RTP/SCS on TCM implementation.

Further, applicable regulation requires that “[t]he conformity determination must use the latest existing information regarding the effectiveness of the TCMs and other implementation plan measures which have already been implemented.” (40 C.F.R. § 93.110(e).) This requirement is not met merely by referencing the TCMs that have been adopted, or in noting that the adopted TCMs are not new, as the Analysis does. We suspect that the latest existing information would suggest that the relevant TCMs are ineffective, but there is no basis to evaluate that suspicion from the discussion in the Conformity Analysis.

Similarly, it appears that the VMT modeling is done using data from 2007 through 2010. (*See* Conformity Analysis pp. 24-25.) If this is correct, EPA/DOT guidance require that MCTC include a “written justification” of why more recent data was not used. (Conformity Analysis, Appx. A.) The Conformity Analysis does not contain such an explanation.

Finally, the implementing regulations for the conformity requirement contain public consultation requirements. (40 C.F.R. § 93.105(e).) Under these regulations, “[a]ffected agencies making

Mr. Stone  
September 17, 2018  
Page 5

conformity determinations on transportation plans, programs, and projects shall establish a ***proactive public involvement process*** which provides opportunity for public review and comment by, at a minimum, providing reasonable public access to technical and policy information considered by the agency at the beginning of the public comment period...consistent with these requirements and those of 23 CFR § 450.316(a).” (*Id.* [emphasis added].) In turn, 23 C.F.R. § 450.316 contains various requirements for public consultation. For the reasons discussed in our July 24, 2018 letter, MCTC’s efforts at public engagement do not qualify as proactive and do not meet the requirements of § 450.316(a). (*See* Ex. A, pp. 6-7.)

We look forward to discussing these issues further with staff and the Commission at the hearing presently scheduled for September 19, 2018. Please do not hesitate to contact us with any questions or concerns.

Best Regards,

A handwritten signature in dark ink, appearing to read "Michael K. Claiborne", with a stylized, cursive script.

Michael K. Claiborne, Esq.  
Leadership Counsel for Justice & Accountability

Cc: Karen Perritt, Federal Highway Administration

# EXHIBIT A





July 24, 2018

**Sent Via Email [dylan@maderactc.org]**

Dylan Stone  
Regional Planning Supervisors  
Madera County Transportation Commission  
2001 Howard Road, Suite 201  
Madera, California 93637

**Re: Draft 2018 Regional Transportation Plan And Sustainable Communities Strategy;  
Draft Environmental Impact Report**

Dear Mr. Stone,

Thank you for the opportunity to comment on the Draft 2018 Regional Transportation Plan for Madera County.

We write on behalf of Leadership Counsel for Justice and Accountability (Leadership Counsel), as well as Lideres Campesinas, community residents from La Vina, and Fairmead, and Central California Asthma Coalition. Leadership Counsel has actively engaged throughout the RTP update process to seek equitable transportation investments in low-income communities and communities of color that are disproportionately impacted by poor air and lack essential transportation infrastructure. The recommendations set forth in this letter reflect the priorities expressed by community residents during this process and resulted from numerous community meetings and individual conversations pertaining to the 2018 RTP process.

We would like to thank the Madera County Transportation Commission (MCTC) for inviting us to serve on the RTP/SCS roundtable to discuss the planning document. Further, we appreciate MCTC staff for attending community events in Fairmead and La Vina to discuss the RTP/SCS with residents of Madera County.

Through these comments and our continued participation in this RTP/SCS update process, Leadership Counsel aims to ensure that MCTC considers and develops sustainable and equitable policies that comply with state and federal mandates and guidance, and that respond to and advance the priorities identified by community leaders from disadvantaged communities. Incorporation of these community-driven recommendations will ensure that the RTP/SCS includes an integrated and comprehensive multimodal transportation system that affirmatively

addresses the adverse conditions impacting low-income communities as required by state and federal law.

MCTC has made some progress in developing comprehensive policies that consider the needs of low-income communities. However, the Draft falls short of applicable legal mandates and guidance in several ways. First, while the Draft documents the steps taken by MCTC to facilitate public participation, it fails to show that MCTC gave “explicit consideration” to public input, including input provided by residents of disadvantaged communities, as required by California Department of Transportation’s (CalTrans’) 2017 RTP Guidelines. (p. 87.) Second, while investing robustly in roadway expansion, the Draft fails entirely to identify the significant active transportation and public transit needs that impact low-income communities and communities of color in Madera, and fails to meaningfully address those needs to provide for an equitable and comprehensive multi-modal regional transportation system. Third, the RTP includes no discussion of and does not plan to address the impacts of climate change on the regional transportation system and related resiliency needs.. Fourth, the RTP includes no analysis or information to show that it has identified areas within the region sufficient to meet the housing needs of and provide for a suitable living environment for *all* economic segments of the population as required. MCTC must revise the Draft to address these and other inconsistencies with state and federal law and guidance to create an equitable, comprehensive, and integrated transportation network.

We provide the following recommendations and analysis to assist MCTC in the development of the Final RTP.

## **I. Legal Background**

All metropolitan planning organizations (MPOs) in California must comply with Senate Bill 375 (2008). In passing SB 375, the legislature recognized that “[w]ithout improved land use and transportation policy, California will not be able to achieve the [GHG reduction] goals of AB 32.” To improve land use and transportation policy, SB 375 requires, among other things, that every MPO to adopt a sustainable communities strategy (SCS) as part of its RTP. The SCS must be designed to meet greenhouse gas reduction (GHG) targets for automobiles and light trucks in the region, if it is feasible to do so.

The RTP and SCS must additionally be “action-oriented and pragmatic, considering both the short-term and long-term future, and shall present clear, concise policy guidance to local and state officials.” (Gov. Code § 65080(a).) The RTP as a whole, including the SCS, must be an “internally consistent document.” (Gov. Code § 65080(b).) Further, the RTP must set forth a “coordinated and balanced regional transportation system, including, but not limited to, mass

transportation, highway, railroad, maritime, bicycle, pedestrian, goods movement, and aviation facilities and services.” (Gov. Code § 65080(a).)

Transportation agencies have legal obligations to environmental justice communities to ensure equitable investments and establish processes that prevent discriminatory practices. Title VI and its implementing regulations bar both intentional discrimination and “disparate impact” discrimination (i.e., a neutral policy or practice that has an unjustified disparate impact on protected groups). (See 49 CFR § 21.5(b)(2) [“A recipient...may not... utilize criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program with respect to individuals of a particular race, color, or national origin”] [emphasis added].)

Certain acts are expressly deemed discriminatory under 49 CFR §§ 21.5(b)(1): “A recipient to which this part applies may not, directly or through contractual or other arrangements, on the grounds of race, color, or national origin ... Provide any service, financial aid, or other benefit to a person which is different, or is provided in a different manner, from that provided to others under the program [or] ... Subject a person to segregation or separate treatment in any matter related to his receipt of any service, financial aid, or other benefit under the program.” ([emphasis added].)

Once the MPO has adopted the RTP and SCS, it “shall submit a sustainable communities strategy...to the state [Air Resources] board for review, including the quantification of the greenhouse gas emission reductions the strategy would achieve and a description of the technical methodology used to obtain that result.” (Gov. Code § 65080(b)(2)(J)(ii).)

## **II. Revisions to Policy Element to Ensure Equitable Access, Reflect Community Priorities and Address Issues in Disadvantaged Communities.**

First, we would like to thank MCTC for incorporating many of our comments from our October 19, 2017 letter. (Attached as Appx. A.) However, key priorities and community comments have not been incorporated. Additionally, we would like to provide feedback to ensure the Shared Vision encompasses the goals of various stakeholders in the communities.

### **A. Change The Fourth Principle To Success To Reflect Community Health And Environmental Priorities.**

The fourth “Principle to Success” in the draft RTP states:

“Health and Environment - MCTC’s plans, programs, and policies will give preference to new development and economic prosperity in ways that

ensure its citizens, maintain and enhance the surrounding environment (cultural and socioeconomic resources), and those ways that enhance the regions financial stability over time.”

(DEIR 4-4.)

We understand that this policy is structured to ensure that future county planning will be guided by policies that will promote equity and public health priorities among other factors. As written now, this policy does not adequately address the health or environment of the region, rather focusing on solely on economic prosperity. We believe that this principle should be reflective of the various comments from workshops around the County. MCTC should also ensure that its policies are not excluding existing communities and prioritize communities who need investment to address health and environment concerns in the community.

MCTC new Health and Environment Principle should read:

“Health and Environment - MCTC’s plans, programs, and policies will prioritize investments that address the health, safety, and environmental issues of the existing communities in the county, to ensure that MCTC does not incentivise disparities within the county.”

**B. Identify And Include Rural Transportation Issues As A Regional Concern.**

Gov. Code § 65080(b)(1) states the RTP shall include a “policy element that *describes the transportation issues in the region, identifies and quantifies regional needs*, and describes the desired short-range and long-range transportation goals, and pragmatic objective and policy statements” (emphasis added). Furthermore, according to Caltrans’ RTP Guidelines:

The consideration of rural communities within the region in the development of the RTP (including the SCS) is a key element in the process, to ensure that regional GHG reductions and associated co-benefits such as improved access to jobs and services are not achieved at the expense of small towns and rural communities where high frequency transit and/or high-density development is not feasible. The RTP process should consider policies and programs for investments in rural communities that improve sustainability and access to jobs and services and that protect resource areas, farmland, and agricultural economies.”

(California Transportation Commission RTP Guidelines for Metropolitan Planning Organizations (“RTP Guidelines”) p..139.)

Contrary to this law and binding guidance,<sup>1</sup> the Draft 2018 Policy Element does nothing to describe the particular transportation needs or challenges of rural communities and does not incorporate any policies specifically targeted to address those needs or to direct investments to improve the sustainability of rural communities.<sup>2</sup> Yet unincorporated Madera County is home to almost 25,000 households, most of which are located in rural areas. Rural communities, and especially disadvantaged unincorporated communities, have unique and often serious transportation needs due to the lack of investment in core transportation infrastructure and services in these communities coupled with isolation from many essential amenities and services, such as fresh food, health care, educational and employment opportunities. Based on our experience working directly with disadvantaged unincorporated rural communities, we know that they often lack sidewalks to schools and other key locations, stormwater drainage, street lights, paved or maintained roads, bus shelters, regular transit routes, and other essential infrastructure improvements and services necessary to support an integrated multi-modal transit system

By failing to identify or include policies to address the transportation and investment needs of rural communities in Madera County, the Draft RTP fails to plan for the needs of the region as required by Government Code Section 65080 and the RTP Guidelines.

**C. Add Policies To The Policy Element From October Letter To Ensure That The 2018 RTP/SCS Plans For An Equitable And Comprehensive Network.**

While the Draft RTP reflects some of the suggestions contained in our October 19, 2017, it excludes various recommendations which we believe are critical to ensuring that the Policy Element plans for an equitable and comprehensive transportation network and responds to the priorities raised by residents during opportunities for public participation.. We therefore recommend that MCTC incorporate the following policies into the policy element:

1. Encourage development in existing communities rather than encouraging sprawl in the region.
2. Include a policy that encourages and incentivizes agencies to promote public transit, walking, bicycling, and ridesharing as viable and convenient alternatives to driving.
3. Include a policy that commits agencies to to set aside 30% of transportation funds for disadvantaged communities in response to historic disinvestment.
4. Direct a percentage of planning funds specifically to plan for projects in disadvantaged communities through e.g. the Healthy and Liveable Communities Grant program.

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<sup>1</sup> Pursuant to Government Code Section 65080(d), RTPs “shall conform to the regional transportation plan guidelines adopted by the California Transportation Commission.”

<sup>2</sup> Rather than plan for a thriving future for the region’s rural communities, the RTP in fact envisions the *reduction* in the population of unincorporated Madera between 2020 and 2035. Table 1-2, Ch. 1-5.

5. MCTC and other agencies will provide technical assistance and grant writing to disadvantaged communities to develop competitive application for ATP and other funding.
6. Align scoring criteria to support investment in transportation infrastructure in disadvantaged communities and for vulnerable groups.

### **III. Lack Of Transparency During RTP/SCS Process**

State and Federal Law and guidance establish robust community engagement requirements which are intended to ensure transparency, inclusivity, and equity in the RTP's development. During SCS development, the MPO must "...provide the public with the information and tools necessary to provide a clear understanding of the issues and policy choices." (Gov. Code § 65080(b)(2)(F)(iii).) Similarly, an MPO "shall disseminate the methodology, results, and key assumptions of whichever travel demand models it uses in a way that would be useable and understandable to the public." (Gov. Code, § 14522.2(a).)

Additionally, the RTP Guidelines require that MPOs "demonstrate explicit consideration and response to public input on the RTP" and "seek out and consider the needs of those traditionally underserved by transit," including low-income households and households of color. (p. 87.) In reviewing RTPs for compliance with Title VI of the Civil Rights Act, the U.S. Department of Transportation ("DOT") considers what mechanisms are in place to ensure that the issues and concerns raised by low-income populations and people of color are appropriately considered and what evidence exists to show that such consideration has occurred. (U.S. DOT, Memorandum, Implementing Title VI Requirements in Metropolitan and Statewide Planning.)<sup>3</sup>

Furthermore, SB 375 requires that the MPO adopt a public participation plan "to encourage the active participation of a broad range of stakeholder groups in the planning process, consistent with the agency's adopted Federal Public Participation Plan..." (Gov. Code § 65080(b)(2)(F)(i).) Federal regulations similarly require that the MPO "develop and use" a public participation plan. (23 CFR 450.316.)

MCTC's adopted public participation plan establishes a "baseline for MCTC communication policies and procedures ensuring that public is well informed turning the decision-making process" and commits MCTC to explicitly consider and respond to public input received during the RTP's development. Public Participation Plan, Commitment 3." Additionally, MCTC made four other commitments,<sup>4</sup> including, "Access to All, Response to Public Engagement, Open Communication, and Review."

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<sup>3</sup> Available at [https://www.fhwa.dot.gov/environment/environmental\\_justice/legislation/ej-10-7.cfm](https://www.fhwa.dot.gov/environment/environmental_justice/legislation/ej-10-7.cfm)

<sup>4</sup> Madera County Transportation Commission 2017 Public Participation Plan, available at <http://www.maderactc.org/wp-content/uploads/2017/09/2017-PPP-Final-w-cover.pdf>

While the Draft RTP identifies various outreach activities conducted by MCTC, MCTC has failed to comply with its public participation requirements, because: (1) MCTC failed to provide the public with critical information that was necessary for residents to meaningfully engage in the public process; and (2) the Draft fails to reflect the input of residents and in particular, needs and funding priorities expressed by residents from disadvantaged communities who participated in the public engagement process. MCTC must commit to facilitating a meaningful public process in which all residents have ample opportunities to participate going forward and must revise the Draft RTP to reflect the input provided by residents of disadvantaged communities.

**A. MCTC Must Conduct Additional Workshops To Provide The Information And Tools Necessary To Provide The Public With A Clear Understanding Of The Issues And Policy Choices.**

SB 373 requires MPOs to provide the public with the “information and tools necessary to provide the public with a clear understanding of the issues and policy choices” and the “methodology, results, and key assumptions” of its travel demand model. (Gov. Code §§ 65080(b)(2)(F)(iii); 14522.2(a).) Further, every RTP is required to include a description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with Government Code §450.306(d), which requires that the long-range planning process provide for the establishment and use of a performance-based approach to transportation decision-making to support national goals. (23 CFR § 450.324(f)(3).)

During the third round of workshops, MCTC presented three scenarios, entitled respectively: Status Quo, Hybrid, and Moderate Change. However, at the workshops, staff provided incomplete information which prevented the public from fully understanding the scenarios and from providing informed input. For instance, staff provided no information regarding projected GHG emissions reductions, housing types and distribution, Vehicle Miles Traveled (VMT), and the location of investments under each scenario

On April 12, 2018, MCTC held an “Open House” where the Roundtable viewed the scenarios for the first time. MCTC again failed to provide critical information regarding the scenarios during the Open House. Further, staff failed to provide the materials related to the scenarios in Spanish, preventing Spanish-speaking residents from providing informed feedback.

The MCTC Staff, MCTC board and the RTP/SCS Roundtable selected a preferred scenario on April 16, 2018, although, VMT’s, though GHG reduction and project lists for each scenario were not formally presented to community residents. At the time of selection, the only indicator available was “Farmland Used.” Leadership Counsel abstained on the Roundtable vote and requested that the MCTC board postpone its selection until after holding another round of

workshops. The board denied this request and selected the “Moderate Change” as the preferred scenario for Madera County. Considering the information above, community residents were not given enough information about the scenarios to meaningfully engage at workshops and at community meetings, or to give constructive feedback to MCTC staff.

Given that the central purpose of an RTP as established by SB 375 is to reduce transportation-related greenhouse gas emissions, MCTC’s failure to provide the public with information regarding the scenario’s respective emissions reductions deprived the public of critical information necessary to understand and provide input on issues and policy choices relevant to the update. In order to achieve the goals established by SB 375, MCTC must provide all relevant information to community members, including but not limited to GHG reductions associated with each scenario. As previously requested, MCTC should hold another round of workshops where it presents the scenarios, including all the indicators that are now contained in the draft RTP/SCS, in addition to presenting project lists for each scenario, a visual breakdown of where transportation revenue will be invested by mode and location, and how much investment DAC’s in the county will receive. Leadership Counsel would be willing to help present this new information to communities we work with as well as to provide examples of what these visual could look like from other RTP’s in the Central Valley.

**B. MCTC Violated Its Commitment To “Demonstrate Explicit Consideration And Response” To Public Input.**

Commitment three of MCTC’s Public Participation Plan states that MCTC will, “Demonstrate explicit consideration and response to public input received during the development of the RTP.” However, during the development of the 2018 RTP/SCS Leadership Counsel submitted letters with no formal response and also eliciting response from staff, violating the Public Participation Plan. MCTC must be responsive and follow its commitments to the public participation process. After the letters were submitted there was no record of MCTC staff taking suggestions into consideration, nor what was included and what was omitted from the 2018 RTP/SCS. Residents also provided feedback to MCTC through this process, both at workshops and through “Pop-Up” events, but there is no record of what MCTC staff considered, and where those suggestion accepted are reflected in the RTP.

MCTC must also ensure that it upholds its commitment to ensuring access to all. In Madera County alone, there are 44 disadvantaged unincorporated communities<sup>5</sup> (DACs), and it is imperative that these communities are continually engaged in RTP development. We understand that there is difficulty in reaching DAC’s, but we urge for MCTC to exercise actions listed in the “Public Participation Strategies,” specifically the “Public Meetings/Workshops,” section in the Public Participation Plan, as well as consider other options that may render cost-effective, but

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<sup>5</sup> [http://www.policylink.org/sites/default/files/CA%20UNINCORPORATED\\_FINAL.pdf](http://www.policylink.org/sites/default/files/CA%20UNINCORPORATED_FINAL.pdf)



meaningful engagement. Additionally, state law requires public agencies to take appropriate steps to ensure that translation services are available to intended beneficiaries of any programs that receive state funds, such as many of the projects included in the RTP. (Gov. Code § 11135; 2 C.C.R. § 11162.) However, many of the exhibits presented at the workshops were only presented in English and consequently ineffective to many participants.

Furthermore, state law SB 375 requires that “[a] metropolitan planning organization shall disseminate the methodology, results, and key assumptions of whichever travel demand models it uses in a way that would be usable and understandable to the public.” (Gov. Code § 14522.2.) As the chosen method of dissemination was exhibits and powerpoint presentations, and as untranslated exhibits will not be “usable and understandable” to a large segment of the public, MCTC is not in compliance with state law.

We recommend the following policies to be integrated into the Public Participation Plan and future RTP public participation processes, as applicable:

1. A minimum of 25% of funds dedicated to public participation set-aside to ensure that residents from unincorporated areas have opportunity to participate in workshops, meetings, etc.
2. All materials must be translated into Spanish and other commonly spoken languages in Madera. A translator or multiple translators (depending on size of meeting) must be present for all workshops and related events.
3. Jurisdictions will host multiple workshops in various locations that are accessible to the public, prioritizing isolated unincorporated areas throughout Madera.
4. Transit services should be available at no cost to residents who do not have access to transportation services but wish to attend workshops.
5. Roundtable board members will have the opportunity to present new information and feedback at any stage of the process. These recommendations should be analyzed and presented to the MCTC board for consideration.
6. MCTC should be required to present completed work and sufficient information so can community can make community choices
7. Community residents deserve the right to have a Community Preferred Scenario
8. Establish a Mini-Grant Outreach Program that will facilitate partnership with local CBO's who can assist with public participation efforts.
9. Establish a process in which comments submitted to MCTC will notify commenter of reception, as well as receiving a response in a timely manner.
10. Develop an specific plan to engage disadvantaged unincorporated communities with the assistance of community based organizations in the community.

**C. Establish A Mini-Grant Outreach Program To Facilitate Public Engagement**

The RTP public participation process can be strengthened through ongoing collaboration and partnership with community-based organizations with direct connection with residents. For example, Fresno COG established the Mini-Grant Outreach Program which provided 5,000 dollars to community-based organizations to assist in the RTP outreach efforts. In the past, these funds have been used to facilitate community engagement in unincorporated communities, translation services, food, and childcare. The Mini-Grant Outreach program can serve as a model for future RTP plans and current plans like the Public Participation Plan to ensure effective outreach through ongoing collaboration with organizations.

#### **IV. The RTP/SCS Must Be Revised to Prioritize Equity and Investments in Disadvantaged Communities**

Federal law requires the metropolitan planning process to be “continuous, cooperative, and comprehensive,” and “include strategies and actions that lead to the development of an integrated multimodal transportation system.” (23 CFR §450.350(b), 23 CFR 450.324(b).) However, the Draft RTP/SCS fails to address the transportation needs of rural communities, stipulates unreasonably long timelines for completion of projects benefiting disadvantaged communities, and does not include effective planning for transportation that complements availability of affordable housing. By failing to invest in the needs of rural areas and disadvantaged communities in a timely manner that ensures their connection to the regional system and failing to properly analyze the plan’s allocation of benefits to protected classes, inadequately investing in rural areas and not ensuring their connectivity to the rest of the transportation system, the 2018 Draft RTP/SCS does not satisfy the requirement to plan for an “integrated” or “comprehensive” multimodal system.

Furthermore, federal and state civil rights law requires MCTC to ensure that it does not discriminate against protected classes, either intentionally or in effect. (42 USC § 2000d, 49 CFR § 21.5(b)(2); Gov. Code §§ 11135.) Where present or prior discriminatory practices or patterns result in inferior access to services, MPOs must take action to overcome the persisting effects of those practices or patterns. 49 U.S.C. § 21.5(b)(7). Many disadvantaged communities within the Madera region are disproportionately comprised of people of color, low-income, and immigrants and also disproportionately lack access to basic public and private investments, including transportation investments such as sidewalks, streetlights, and stormwater drainage, as a result, at least in part, of discriminatory practices. However, the RTP not only fails to include projects which will affirmatively address these discriminatory practices but entrenches historic discrimination by failing to include most of the projects identified by residents as critical to addressing the needs of disadvantaged communities. We recommend the following revisions to the Draft RTP to ensure that MCTC is in compliance with federal and state civil rights law.

**A. An RTP That “Gives Preference To New Development” Does Not Comply With The Requirement That An RTP Set Forth A “Coordinated And Balanced Regional Transportation System.”**

According to Gov. Code § 65080(a), “Each transportation planning agency designated under Section 29532 or 29532.1 shall prepare and adopt a regional transportation plan directed at achieving a coordinated and balanced regional transportation system” as written today, the 2018 Draft RTP/SCS does not set forth a well balanced regional transportation system. As drafted, the RTP/SCS is centered around economic vitality with little shared focus on the transportation needs of disadvantaged communities. There are several policies within the Shared Vision section that allude to the notion that new developments will be prioritized when implementing policies that will improve the quality of life and health, specifically, the fourth Principle of success and Objectives 23, 26, 27 and 33. (pg. 72-77).)

In the 2018 RTP, the few projects in DAC’s, are not set to be completed until 2025, while projects located in close proximity to Avenue 12 are being funded in 2018 and 2019. While roads are being overlaid to benefit the new developments in the County, La Vina’s main road, Avenue 9, experiences flooding and residents are unable to walk or drive to the only grocery store in the community. This issue was raised both at the first RTP workshop by Leadership Counsel, a meeting with MCTC staff with Leadership Counsel and at the “pop- up” event held in La Vina, yet it is not listed as a project to be funded.

MCTC must ensure that projects directly benefiting existing communities will be prioritized in the 2018 RTP/SCS. (See 23 CFR §§ 450.300; 450.305(b); 49 CFR 21.5(b)(7).) This is consistent with the CalTrans Guidelines which describe consideration of rural communities a “key element” of the transportation planning process. (p. 153.) Disadvantaged communities in the Madera region, particularly those rural communities of color on the Valley floor, lack of sidewalks, lighting, inadequate road and lack of reliable public transit options more so than other affluent areas in the region. Thus, it is essential for the RTP/SCS to ensure that transportation investments are allocated with the intention to create a balanced regional transportation system.

MCTC’s first priority must be to serve the existing communities that live, work and shop in the Madera region. This is a priority that was brought up in several community meetings as well as the Madera Ranchos workshop that Leadership Counsel attended. MCTC must first prioritize existing regional transportation networks and develop innovative strategies to make all communities in the region healthy and walkable. Most of the funding revenue included in the RTP is focused in the Rio Mesa development areas while low-income communities of color see little investment in the planning period.

One way that the 2018 RTP/SCS can ensure balance is to identify the needs for disadvantaged communities in the Madera region to address them in the 2018 RTP/SCS. We recommend that MCTC conduct a Disadvantaged Communities Transportation Needs Assessment, ensure it is included in the 2022 RTP/SCS in the Environmental Justice section, and add a section in the Action Element to fund it. The assessment process should include targeted workshops within disadvantaged communities, as well as regional workshops to identify the transportation projects needed to connect them to critical resources and services, such as health centers, grocery stores, educational centers. Many disadvantaged communities in the region do not have sufficient data to justify or explain transit related needs, which makes it difficult if not impossible for MCTC and local governments to systematically address needs of these communities and respond to historic and ongoing disinvestment.

**B. The RTP Must Acknowledge That Roadway Expansion Induces Driving and Prioritize Strategies That Advance Air Quality And Climate Goals.**

The Draft discusses and highlights the expansion and widening of highway projects as an opportunity to alleviate congestion and it equally benefits low-income community as well as affluent communities. Additionally, many of the highway 99 expansion and improvements are said to directly benefit and count as investment dollars to disadvantaged communities. For example, Highways 99 projects are said to benefit the Target Area 1 (where La Vina is located) because of their drive-to-work population. This analysis is flawed, as it does not acknowledge that many low-income communities and communities of color do not have access to personal vehicles, do not rely on the state highway system and instead use rural roads and thus, do not benefit from improvements to highways. However, low-income communities of color communities disproportionately need investment in non-motorized projects as they typically have no basic active transportation infrastructure.

Residents in La Vina also noted that they do not have direct access to SR-99 and disagree that any project to enhance SR-99 will benefit their community. La Vina has other urgent transportation needs, such as sidewalks from housing to school and nearby La Vina Market. While, in some instances, road expansion might have the potential to temporarily decrease congestion and emissions, this is not always true and is unlikely to present an effective long-term strategy as required by SB 375. It also implies that roadway development can alleviate congestion. However, research has found that expanding roadway capacity expansion is counterproductive. It fails to alleviate congestion and leads to both short- and long-term increases in vehicle miles traveled and associated air pollution. A recent study has found that “[a] capacity expansion of 10% is likely to increase VMT by 3% to 6% in the short-run and 6% to 10% in the long-run.”<sup>6</sup>

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<sup>6</sup> Handy, Susan. (2015). Increasing Highway Capacity Unlikely to Relieve Traffic Congestion. [http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST\\_Brief\\_InducedTravel\\_CS6\\_v3.pdf](http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf)

The Vast majority of funding in the 2018 Madera RTP/SCS goes to capacity-increasing project highway and arterial improvement projects — more than \$1.004 billion dollars (p. 22) — while only \$54.5 million is allocated for non-motorized projects (p. 119). As written now, the RTP focuses on the LOS deficiencies to prioritize roadway improvement, yet California is shifting to a VMT reducing framework recognizing that LOS focus promoted poor land use practice and air pollution at the expense of investment in existing communities. Considering the stated, we ask for MCTC to consider adopting the following policy:

"Except where needed to serve existing communities that currently lack paved road networks, limit roadway expansion and instead prioritize alternative solutions to reduce congestion by promoting alternatives to single-occupancy driving, including public transit, electric car- and van-pooling, a better jobs-housing fit, and cycling or walking."

**V. Identify the Housing Needs and Ensure the 2018 RTP/SCS Reflects The Entire Regions Needs**

Pursuant to Government Code Section 65080(b)(2)(B), the SCS must “(ii) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth”; and (iii) “identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Section 65584...” The SCS in turn drives local jurisdictions’ respective obligations to plan for affordable housing under state housing element law, as the RHNA plan adopted by the COG for local jurisdiction’s RHNA must be consistent with the SCS’ development pattern. Gov. Code Sec. 65584.01(i)(1).

Housing obligations specified in state law require that jurisdictions implementing a regional transportation plan must “*consider the state housing goals*” including a suitable living environment for all economic segments of the populations including farmworkers. Government Code Section 65581(a) states that, “[t]he availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every Californian, including farmworkers, is a priority of the highest order.”

The Draft RTP/SCS provides **no** information regarding the availability of and does not identify land to meet the housing needs of different economic segments of the population in Madera. However, according to the Madera County Housing Element, lower income residents struggle to find affordable rental housing and low income communities have difficulty in finding affordable units throughout Madera County (Housing Element 2-22). The average monthly rent in Madera county is \$861, however that is considered unaffordable to 41.6% percent of the population in

the country which fall under the extremely low income, very low income and low income categories (2-27). Madera County is also home to a farmer worker population of about 40,000, whose median income is about \$12,000 a year (2-34). The Housing Element acknowledges the severe housing conditions that farmworkers face and the need to plan for them.

The Draft only identifies areas of projected future residential development without providing any information about the income levels of the populations that that development may be expected to serve and whether areas identified for development are sufficient to meet the housing needs of the population for both the eight-year RHNA planning period and the RTP planning horizon. The Draft further does include any information or discussion about the RTP's relationship to the state housing goals, including the attainment of decent housing and a "suitable living environment" for all Californians, including farmworkers.

The Draft is devoid of any no goal-oriented policies or commitments to advance access to decent affordable housing and a suitable living environment for all economic segments of the population throughout the region. The only policy included in the Draft that relates to affordable housing development is a general policy stating MCTC's obligation under housing element law to develop the RHNA consistently with the SCS to "decide how to address existing and future housing and transportation needs." Policy 32, Ch. 4-8. The specific commitment entailed by this policy is unclear, since the RHNA process involves only a determination of the allocation of housing need by income level among jurisdictions and does include a process to determine how to allocate resources. Regardless, the Draft includes **no** present commitments by MCTC to take any action that will further the state housing goals and promote attainment of decent housing and a suitable living environment for all.

MCTC must revise the Draft to include policies and actions to facilitate the achievement of the state housing goals. For example, MCTC can require local agencies to demonstrate compliance with state housing element law mandates that local governments maintain and effectively implement a compliant housing element before allocating funding to projects proposed by local agencies. MCTC can also modify project scoring criteria to incentivize jurisdictions to seek and utilize funding to develop and maintain affordable housing pursuant to Senate Bill 2 (2017) and should require that developments benefiting from road capacity enhancing projects incorporate units affordable to lower-income residents.

The draft needs to be revised to include clear policy commitments and programs that guarantee affordable housing in low-income communities rather than discuss the likelihood of diverse housing choices. It also must include an analysis of the availability of very low, low and moderate income units necessary to meet Madera County's regional housing needs allocation. As the draft presently stands, MCTC has not complied with the requirement to identify areas

within the region “sufficient to house all populations...including all economic segments of the population...” (Gov. Code Section 65080(b)(2)(B).)

**VI. Scenarios Must Consider and Prioritize Improving Air Quality and Reducing VMTs.**

Staff recommendation, RTP Roundtable and the MCTC board selected the Moderate Change scenario as the preferred scenario for the 2018 RTP/SCS. MCTC suggest that this scenario will meet GHG reduction targets and complies with the MCTC Policy Element. After analysis, we have concluded that all scenarios presented to community members are very similar. Many scenarios performance measures are alike or share small discrepancies. Although considered the most aggressive, the Moderate Change scenario, has only slightly lower GHG reductions than other scenarios. However, the RTP lacks justification for modeling assumptions used which appear to significantly reduce the scenario’s projected GHGs and allow MCTC to find that the scenario meets its GHG reduction targets. Specifically, the RTP acknowledges that commute-related VMT comprises a large portion of the County’s anticipated GHGs. At the same time, Table 6-3, 2018 RTP/SCS UPlan Land Use Allocation Model Parameters, projects that in the Southeast Growth Area -- the area planned for the most development of any area of the County by thousands of households in all three scenarios -- only .56 workers per households compared to other areas which range between 1.41, 1.54, and 1.76 workers per household. By estimating approximately 3 times fewer workers per household in the homes in the Southeast Growth Area, the Draft dramatically underestimates commute-related GHGs from this area. The Southeast Growth Area is comprised almost entirely of purely residential development, with residents commuting to Fresno and other areas of the region for work. The Draft appears to include no explanation or justification for the significantly lower worker per household estimate for the Southeast Growth Area compared to other areas and thus, the Draft’s conclusion that the Hybrid scenario will achieve MCTC’s GHG targets is unfounded.

The draft currently does not comply with the requirement to develop a “comprehensive performance-based multimodal transportation planning process...” (23 CFR §450.300) as the current scenarios do not present a performance measure to represent the amount of investment going towards active transportation. This RTP outlines goals and policies aimed at promoting transportation through non-motorized projects, but the funding allocations to prove that to be out of compliance as Table 6-5 only allocates .6 of funding to non-motorized projects and .75 to congestion relief and streets and roads. For a Regional Transportation Plan located in the San Joaquin Valley, which is classified as nonattainment, there is no Madera specific analysis to address the air quality through transportation investment. We suggest that MCTC develop a scenario that ties equitable active transportation investments to air quality improvement.

**A. Develop a Scenario that Prioritizes Reducing GHG, Addresses Equity and Prioritizes the Health of Community Residents.**

As stated above, the scenarios presented do not comply with the goals of SB 375 or prioritize the health and quality of life of the community. MCTC should consider adopting a scenario where funding is focused on reducing GHGs and VMT's through projects that community residents have advocated for through the RTP process and other venues to provide feedback transportation. Using Table 7-4 as a reference point, we recommend that MCTC adopts the following suggestions:

**1. Allocate More Funding to Rehabilitation of Roads and Less Focus on Capacity Increasing Projects.**

The Draft RTP/SCS is allocating 75% of its budget to "Streets and Highway" projects however only 13%, \$215.38 million, is being used for rehabilitation and safety projects. This leaves 62%, \$1,004.12 million, to be used for capacity increasing projects. As stated previously, capacity increasing projects induce more driving and thus do not mitigate air quality long term. Considering the feedback given from local community members, fixing local roads is a county-wide priority that must be addressed in the 2018 RTP. Considering Table 7-2, 68% of all funding will be derived from local funds, the greatest source of funding for Madera county. It is integral for MCTC and local agencies to fund projects that community residents continuously advocate for. Additionally, the CalTrans Guidelines are adamant in expressing the importance of local road networks in providing "an interconnected, multi-modal transportation system where every trip begins and ends....The local system will become ever more important in supporting the goals of climate change and building sustainable communities, as local streets and roads serve as the right-of-way for transit, bicycle and pedestrian travel." Guidelines, p. 125.

**2. Increase Active Transportation and Public Transit Funding Each to and 20% for Transit.**

Increased investment in active transportation modes that promote walkability and bicycle options in a community is an essential element in lowering transportation-related greenhouse gas emissions and VMT across the region. According to the Institute for Transportation and Development Policy, the use of active transportation modes such as bicycle in cities has the potential to help reduce energy use and CO2 emissions worldwide by as much as 11 percent.<sup>7</sup> A strong commitment from transportation agencies is needed to promote bicycle travel and reduce car dependency to achieve significant GHG reductions nationwide.

The draft currently allocates 17% of its funding revenue to public transportation and only 6% to Active Transportation projects. With such limited funding for active transportation, projects in disadvantaged communities that have no infrastructure to begin with, have a lower chance of being funded. The current draft RTP states "although it is difficult to prioritize proposed bikeway

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<sup>7</sup> <https://www.itdp.org/2015/11/12/a-global-high-shift-cycling-scenario/>



and pedestrian projects countywide due to funding fluctuations, coordination with larger street improvement projects and relevant private development schedule changes would be appropriate” (5-37), thus creating barriers to active transportation infrastructure in existing disadvantaged communities. The lack of active transportation projects in disadvantaged communities thus creates more VMT’s and communities that do not encourage healthy lifestyles. Additionally, the Similarly, the lack of funding for public transportation in the draft RTP inhibits its power to influence GHG and VMT reductions. Without adequate funding, MCTC does not fully utilize public transportation as a means to significantly reduce GHG and improve Air Quality. Additionally, as written the draft RTP does not include an analysis the deficiencies of public transportation nor those of active transportation. This is essential to developing strategies to understand how to distribute funds equitably, fulfill community needs and improve air quality.

Additionally, the RTP must create a "coordinated and balanced regional transportation system" Gov Code 65080(a). To this end, the lack of investment in active transportation is not coordinated or balanced, since it will leave many communities disconnected and reliant on crumbling or absent active transportation infrastructure while massive investments in roadway expansions proceed. We recommend that this number be increased to a minimum of 20% for both active transportation and transit to meet the needs and priorities of disadvantaged communities in Madera.

### **3. Include and Expand Funding for Transportation Electrification**

According to the Draft 2018 RTP/SCS, only 2% of all funding will be going to “Other” projects, which include no and low emission vehicle projects and electric charging stations. Unfortunately, this 2% is also point for various transportation control projects. There are currently no projects in the RTP for electric charging stations or electric ride pools even though there is a clear need from communities. Residents in unincorporated communities lack access to routes to meet their needs. For example, in La Vina the bus only provides rides two days a week making access to affordable grocery stores, health services and social services difficult for a large part of the community.

Leadership Counsel brought funding opportunities for a program, that was completely backed by the community and no agency this project was discussed with had appetite for pursuing the project, many due to the fact that they feared how it would be funded after the seeding money. MCTC must prioritize community projects that will help create equity and access for disadvantaged communities. Additionally, The Guidelines encourage MPO’s “to support widespread transportation electrification and partner with state agencies to advance California toward the standards and goals outlines in Public Utilities Section 740. 12(a)(1). These include, among other others, “Meeting air quality standards, reducing petroleum use, improving health, and achieve GHG emission reduction goals”. As written now, the 2018 Draft RTP/SCS does not

reflect these standards or show any support in investing in an electric future for disadvantaged communities or shows the MPOs willingness to invest in creative solutions for the region. We recommend that MCTC allocate at least 10% of funding revenue to support more projects that will mitigate air quality and GHG levels, and include a program to proactively seek available to state funding to plan for and develop a robust electric vehicle infrastructure network.

**B. The RTP Must Include Planning and Analysis to Proactively Address the Impacts of Climate Change.**

The RTP Guidelines, to which RTPs adopted by all MPOs in California must conform, state that RTPs should begin to address climate change adaptation in collaboration with State agencies. (Guidelines, pp. 4, 160.) The Guidelines note that, “transportation infrastructure projects that do not consider the impacts of climate may not be eligible to receive state funds.” (p. 160.) Relatedly, recent changes to federal law now require that RTPs provide for consideration of projects and strategies that will improve the resiliency of the transportation system and reduce or mitigate stormwater impacts of surface transportation. (23 U.S.C. § 134(h)(i).)

However, the draft fails to include proactive planning and strategies to address climate change and mitigation of stormwater impacts. For example, stormwater flooding significantly impacts residents from rural unincorporated areas throughout Madera County, and these impacts will only worsen with climate change. The RTP must include policies to ensure that communities are protected from flood and stormwater risks that are exacerbated from any transportation projects planned for by the RTP.

**C. Adopt A Ten-Year Target And Identify Near-Term Investments To Contribute To Caltrans’ Statewide Goals Of Tripling Biking And Doubling Walking By 2020**

Caltrans has set a statewide goal to triple biking and double walking mode shares by 2020 as compared to 2010-2012. Caltrans released a Strategic Management Plan that includes policy priorities and performance targets to increase active transportation with the goal of “improving the quality of life for all Californians by providing mobility choice and increased accessibility to all modes of transportation.”<sup>8</sup> Caltrans has identified five strategic management goals which include: (1) Safety and Health; (2) Stewardship and Efficiency; (3) Sustainable, Livability, and Economy; (4) System Performance; and (5) Organizational Excellence. Each goal is accompanied by specific objectives, performance measures, and targets that will be used to guide

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<sup>8</sup> Caltrans (2015) Strategic Management Plan.  
[http://www.dot.ca.gov/perf/library/pdf/Caltrans\\_Strategic\\_Mgmt\\_Plan\\_033015.pdf](http://www.dot.ca.gov/perf/library/pdf/Caltrans_Strategic_Mgmt_Plan_033015.pdf)

staff in the process of reaching their ten year target. We would encourage Madera County to adopt the same ten-year target and then identify near-term investments that would achieve this.

**D. MCTC Must Incorporate Opportunities to Reduce GHG Reductions in the Goods Movement Sector**

Throughout the Goods Movement Section in the RTP, considers the needs of the many trucking facilities that are located along the SR 99 but, there is little mentioned about how the Madera RTP can encourage for GHG reduction in the Good Movement. Within the Goods Movement section MCTC must include the, “Identification of opportunities or innovations that reduce GHG emissions and criteria air pollutant emissions associated with freight.” Guidelines, p. 129. Additionally, MCTC should “consult with the California Sustainable Freight Action Plan” when developing the freight-related strategies in their respective RTPs”. Guidelines, p. 130.

**VII. The Draft Environmental Impact Report Is Insufficient.**

The California Supreme Court has held that “[t]he foremost principle under CEQA is that the Legislature intended the act ‘to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.’” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 390 (hereinafter “*Laurel Heights*”) quoting *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259 disapproved on other grounds by *Kowis v. Howard* (1992) 3 Cal.4th 888; *Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 112.)

The purpose of an environmental impact report (“EIR”) is to “provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.” (*Laurel Heights*, 47 Cal.3d at 390 citing Pub. Resources Code § 21061; CEQA Guidelines, § 15003, subds. (b)-(e).) The phrase “significant effect on the environment” means “a substantial, or potentially substantial, adverse change in the environment.” (Pub. Resources Code § 21068; *Laurel Heights*, 47 Cal.3d at 390.)

“The EIR is the heart of CEQA, and the mitigation and alternatives discussion forms the core of the EIR.” (*In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1162; *see also Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.)

**A. Project Description**

“[A]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.” (*Washoe Meadows Community v. Department of Parks & Recreation* (2017) 17 Cal.App.5th 277, 287 quoting *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal.App.4th 1036, 1052.) On the other hand, “[a] curtailed, enigmatic or unstable project description draws a red herring across the path of public input.” (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655.) “[O]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives ... .” (*Id.*)

The project description in the subject DEIR is not “accurate, stable and finite,” as it does not give the public and interested parties an accurate view of the project from which to balance project benefits against environmental costs, consider appropriate mitigation measures, or properly weigh other alternatives. The proposed SCS is denoted the “Moderate Growth” scenario, which is described to include “enhanced densities from the *Hybrid* scenario across all growth areas in the County and even higher residential densities in the City of Madera and the Southeast Growth Area (reference Chapter 6 in the RTP/SCS) consistent with the General, Area, and Specific Plans for all jurisdictions.” (DEIR 1-9.) The DEIR states that the project “slightly increases multi-modal improvement projects that have been reflected in the traffic model or in the RTP” and that “[o]ther improvements include existing and future transit system improvements for each of the three transit providers, as well as enhanced transit along major corridors within the region including SR 4, SR 99, SR 145, and Avenue 12.” (*Id.*) Other claims in the project description include the following:

- Transportation options available to all residents
- Slightly increases existing & planned bicycle, pedestrian & transit systems as factors to further attract new development
- Slightly increases county areas & chowchilla residential densities to moderate levels
- Madera city & Rio Mesa - marginally increases the residential density for medium & medium high residential categories

The project description is unclear, misleading and erratic. First, the project does not actually provide “[t]ransportation options available to all residents” given that most disadvantaged unincorporated communities in Madera County have no planned active transportation improvements or additional transit options under the proposed project. Second, the project description does not give the public a clear understanding of how the preferred scenario will impact development patterns, transportation investments, housing affordability, or employment distribution. Third, it is not clear from the RTP/SCS or that there have been any meaningful

increases in existing & planned active transportation expenditures or transit system improvements.

### **B. Baseline Analysis**

“Before the impacts of a project can be assessed and mitigation measures considered, an EIR must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined.” (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 657-658 quoting *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.) CEQA Guidelines state that “‘a description of ‘the physical environmental conditions in the vicinity of the project’ which constitute the ‘baseline physical conditions’ for measuring environmental impacts.’” (*San Joaquin Raptor Rescue Center*, 149 Cal.App.4th at 658 citing Guidelines, § 15125, subd. (a).)

The baseline environmental setting “must be premised on realized physical conditions on the ground, as opposed to merely hypothetical conditions allowable under existing plans...” (*San Joaquin Raptor Rescue Center*, 149 Cal.App.4th at 658.) Further, Environmental conditions may vary from year to year and in some cases it is necessary to consider conditions over a range of time periods. (*Id.*)

The DEIR at issue here does not accurately state a baseline environmental setting for many of the resources that will be impacted by the proposed RTP/SCS. For example, the DEIR states that the status quo includes “transportation options available to all residents as provided historically.” (DEIR 4-17.) In fact, as discussed above, rural disadvantaged communities lack active transportation infrastructure and transit options. As a second example, while the DEIR discusses air quality conditions applicable to the County as a whole, it does not adequately discuss localized air conditions facing freight communities, communities near industrial land uses or agricultural land uses. A third example is the DEIR’s conclusion that “[t]he groundwater situation in the Valley is ideal,” and that only in “localized areas” in the County does groundwater contain elevated levels of nitrates and arsenic. In fact, nitrate and arsenic contamination is widespread throughout Madera County and the San Joaquin Valley in general, and many mountain communities within the County also struggle with uranium contamination.<sup>9</sup>

As the DEIR does not start with an adequate baseline, it cannot accurately assess the impacts of the projects.

### **C. The DEIR Fails To State Social And Economic Impacts.**

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<sup>9</sup> See Human Right to Water Portal, SWRCB, available at [https://www.waterboards.ca.gov/water\\_issues/programs/hr2w/](https://www.waterboards.ca.gov/water_issues/programs/hr2w/)

The conclusions contained in an EIR are subject to judicial review to determine “whether they are supported by substantial evidence and whether the EIR is sufficient as an informational document.” (*Laurel Heights*, 47 Cal.3d at 407.) “Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate...does not constitute substantial evidence.” (Cal. Code Regs., tit. 14, § 15384(a).) Moreover, a conclusion is not supported by substantial evidence, and an EIR is not sufficient as an information document, if its conclusions and discussions are internally inconsistent or contradictory. (*See Communities for a Better Environment*, 184 Cal.App.4th at 89 [“For the foregoing reasons, we agree with the trial court that the EIR fails as an informational document because the EIR’s project description is inconsistent and obscure as to whether the Project enables the Refinery to process heavier crude. ... Due to these errors, the EIR failed its informational purpose under CEQA.”].)

MCTC concludes that there are no significant impacts to minority or low-income populations from either construction or operation of the proposed project. (DEIR 1-56.) As described more fully in Section VIII, *infra*, the proposed project will have disparate impacts on protected classes. The failure of the DEIR to acknowledge impacts to minority and low-income populations renders the document insufficient as an informational document.

**D. The DEIR Fails To Accurately Characterize GHG Reductions.**

The RTP/SCS and DEIR do not provide enough information regarding the modeling methods and data to definitively evaluate the GHG reduction claims. However, there is reason to believe that the per capita GHG reductions stated in the RTP/SCS are inaccurate. (*See* Section VI., *supra*.)

**E. The Alternatives Analysis Is Insufficient.**

CEQA requires that an EIR, in addition to analyzing the environmental effects of a proposed project, also consider and analyze project alternatives that would reduce adverse environmental impacts. (*In re Bay-Delta etc.*, 43 Cal.4th at 1163.) “The CEQA Guidelines state that an EIR must ‘describe a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project ... .’” (*Id.* quoting Cal. Code Regs., tit. 14, § 15126.6, subd. (a).)

There is no “no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason,” which “requires the EIR to set forth only those alternatives necessary to permit a reasoned choice” and to “examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.” (*Id.*)

In the instant draft RTP, MCTC identified nine (9) goals, including:

1. To support equitable access to effective transportation options for all, regardless of race, income, national origin, age, location, physical ability, or any other factor.
2. To promote intermodal transportation systems that are fully accessible, encourage quality and sustainable growth and development, support the region's environmental resource management strategies, and are responsive to the needs of current and future travelers.
- ...
4. To enhance transportation system coordination, efficiency, and intermodal connectivity to keep people and goods moving and meet regional transportation goals. To maintain the efficiency, safety, and security of the region's transportation system.
6. To improve the quality and sustainability of the natural and human built environment through regional cooperation of transportation systems planning activities.
- ...
8. To identify reliable transportation choices through the public participation process approved by MCTC.
9. To protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).

(RTP 1-8 - 1-9.)

To meet these goals, MCTC states in the DEIR that it analyzed the preferred project (the "Moderate Growth" scenario) and three (3) alternatives: No-Project, Status Quo and Hybrid. (DEIR, 1-7.) The No-Project alternative is described as including only planned improvements to the transportation "that would "reasonably" be expected to be constructed and open if the 2014 RTP/SCS is not updated and approved by the Federal Highways Administration (FHWA) by December 12, 2018." (DEIR 4-12.) Further, the No-Project alternative assumes "growth and development (through to the year 2042) would occur in a fashion consistent with the adopted general plans of each of its three local jurisdictions (two cities and the County)..." (*Id.*)

The "Status Quo" alternative "reflects growth consistent with how growth has occurred in the past" and "assumes improvements to the transportation network consistent with the 2018 RTP lists of improvement projects that have been reflected in the traffic model." (DEIR 4-17.) It also

includes “existing and future transit system improvements,” historically provided transportation options, “focus” on driving as the primary form of travel, and existing land use density trends. (*Id.*)

The “Hybrid” alternative is “reflective of the 2014 Preferred RTP/SCS Scenario, which was a combination of the Blueprint Low Change and Moderate Change scenarios.” (DEIR 4-26.) Specifically, the DEIR describes the Hybrid as apply Blueprint Low Change or Moderate Change to various geographic portions of Madera County:

Specifically, the Low Change parameters were applied to the City of Chowchilla General Plan Area or Sphere of Influence, as well as the remaining unincorporated area (except within the Southeast Madera County New Growth Area). The Moderate Change parameters were applied as reflected in Table 6-4 in the 2018 RTP/SCS to the City of Madera and the Southeast Growth Area.

(*Id.*)

As described in the DEIR, all three alternatives describe either the status quo under the adopted 2014 RTP/SCS, or some degree of reversion to policy in place prior to adoption of the 2014 RTP/SCS. This does not constitute a “reasonable range” of alternatives. The *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 17 Cal.App.5th 413 (hereinafter “*Cleveland*”) case is on point. In *Cleveland*, San Diego Association of Governments (SANDAG) certified an EIR for its “2050 Regional Transportation Plan and Sustainable Communities Strategy.” The EIR analyzed seven project alternatives.<sup>10</sup> (*Id.* at 436) However, the *Cleveland* court held that “the EIR’s discussion of project alternatives is deficient because it does not discuss an alternative which could significantly reduce total vehicle miles traveled.” (*Id.*) The court noted that “[a]lthough Alternatives 3a and 3b are labeled ‘transit emphasis’ alternatives, the labeling is a misnomer...these alternatives do not provide any new transit projects or significant service increases.” (*Id.*) Instead of considering an alternative or alternatives that would reduce VMTs, SANDAG considered alternatives that appeared “focused primarily on congestion relief.” (*Id.* at 437.) The court went on to cite SANDAG’s own

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<sup>10</sup> Alternatives analysed in *Cleveland* were as follows: (a) a no-project alternative; (b) two “modified funding strategy” alternatives that deleted or delayed highway improvements and added some transit projects along coupled with two land use patterns; (c) “A transit emphasis alternative, which advanced the development of some transit projects, but did not add any new transit projects (Alternative 3a)”; (d) “The same transit emphasis alternative, but assuming the modified smart growth land use pattern (Alternative 3b)”; (e) “An alternative implementing the transportation plan’s transportation network, but assuming the modified smart growth land use pattern (Alternative 4)”; and (f) “A slow growth alternative, which assumed the application of regulations and/or economic disincentives to slow population and employment and delayed the complete implementation of the transportation plan by five years (Alternative 5)”



conclusion that while congestion relief may provide short-term reductions in greenhouse gas emissions due to more efficient travel, “congestion relief is not necessarily an effective long-term strategy.” (*Id.*)

The alternatives analysis in the DEIR here is significantly less robust than the one rejected by the court in *Cleveland* as containing an inadequate alternatives analysis. As recognized, in the DEIR, “[g]iven the expected population growth from 2010 to 2042, the total VMT was expected to increase relative to 2010 for the proposed RTP/SCS.” (DEIR 3-464.) Table 4-1 in the DEIR compares total VMT under the four alternative scenarios, and notes that the preferred alternative (Moderate Growth) is expected to result in the second lowest total VMT. (DEIR 4-4.) Surprisingly, the “No Project,” alternative results in the lowest VMT according to the DEIR. (*Id.*) Regardless, as no alternative reduces VMT the alternatives analysis is inadequate under *Cleveland*.

Moreover, none of the alternatives meet the goals stated in the draft RTP. The performance measures for each of the three project alternatives are identical or nearly identical for CO<sub>2</sub> emissions per capita in 2020 and 2035, change in CO<sub>2</sub> per capita in 2020 and 2035. (*Id.*) Neither the RTP nor the DEIR contain any metrics relevant to social equity. This does not achieve Goal 1, ensuring equitable access to effective transportation options, especially given that it appears from the financially constrained project list and expenditure summary by mode that the majority of the benefits of the proposed RTP will not go to disadvantaged communities. Allocation of funds to active transportation are significantly lower than any other mode, and thus none of the alternatives achieve Goal 9, encouraging active transportation.

As discussed above, MCTC must — at a minimum — analyze an alternative that focuses resources and other SCS scenario components to maximizing VMT and greenhouse gas reductions in a manner that is equitable to all residents of Madera County. Specifically, the alternative should significantly increase resource allocations to transit and active transportation, while significantly reducing spending on road capacity increasing projects. At the same time, given the unreasonable allocation to road capacity increase projects in the proposed RTP, funding for road maintenance can also be increased. Spending on transit, active transportation and road maintenance should prioritize disadvantaged communities in existing incorporated and unincorporated communities, which have suffered from historic disinvestment and lack of reliable transportation options.

As the DEIR does not analyze a reasonable range of alternatives, it fails as an informational document.

**F. The Mitigation Measures In The DEIR Are Insufficient.**

An EIR must identify “feasible mitigation measures.” (*Laurel Heights*, 47 Cal.3d at 402.) “Mitigation” may include “(a) Avoiding the impact altogether by not taking a certain action or parts of an action; (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; [and] (e) Compensating for the impact by replacing or providing substitute resources or environments.” (Cal. Code Regs., tit. 14, § 15370.) In this context, the term “feasible” means “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” (Cal. Code Regs., tit. 14, § 15364.)

Additionally, “[f]ormulation of mitigation measures should not be deferred until some future time.” (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92 quoting CEQA Guidelines, § 15126.4(a)(1)(B).) An EIR is inadequate if “[t]he success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.” (*Communities for a Better Environment*, 184 Cal.App.4th at 92.)

Here, MCTC acknowledges potential significant and purportedly unavoidable impacts to many environmental issue areas, including but not limited to: aesthetics, conversion of prime farmland, air quality, greenhouse gas emissions, biotic resources, cultural and tribal resources, energy consumptin and conservation, geology, soils and mineral resources, hydrology and water quality, physical division of existing communities, noise, induction of substantial population growth, displacement of people and housing, wastewater treatment and facilities, stormwater facilities, transportation and traffic, and water supply. (DEIR 1-13 - 1-68.) It also identified significant and unavoidable cumulative impacts. (DEIR 5-1.)

Despite acknowledging these significant impacts of the preliminary preferred project, the DEIR restates nearly identical “Significance after Mitigation” statements for each potential impact:

The responsibility to approve land use development consistent with the general plans and the SCS rests with the local jurisdictions and the responsibility to design and construct transportation improvements rests with Caltrans, the local jurisdictions, and other responsible agencies with jurisdiction over a project area. While implementation and monitoring of the above mitigation measures will provide the framework and direction to avoid or reduce the significant impacts identified, it is probable that such impacts could remain significant and unavoidable. As a program-level document, evaluation of all project-specific circumstances is not

plausible. Individual projects will require a project-level analysis to determine appropriate mitigation strategies. As appropriate, MCTC will encourage the implementation of the above-notated mitigation strategies intended to avoid or reduce the significant impacts identified.<sup>11</sup>

(*Id.*)

This position is impermissible under the authority cited above. Specifically, the DEIR is inadequate because the formulation of mitigation measures has been deferred until some future time, and the success and failure of mitigation depends largely upon management plans that have not yet been formulated, and which have not been subject to analysis and review within the EIR. (*Communities for a Better Environment*, 184 Cal.App.4th at 92) While MCTC is correct that it does not have authority to “approve land use development,” it incorrectly implies that it does not have the power to shape land use decisions. As recognized by SB 375, MPOs such as MCTC have the power and duty to: (a) propose an RTP and SCS that shapes land use decisions made by local jurisdictions; and (b) exercise its authority over transportation expenditures to ensure that the RTP and SCS is implemented along with feasible mitigation measures that are necessary to address significant impacts.

CEQA does not permit MCTC merely to shift the burden of implementing mitigation onto other jurisdictions and/or agencies without also adopting monitoring, reporting or other requirements to ensure that the local jurisdictions implement the identified mitigation measures. (Pub. Resources Code, § 21081.6; *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 195.)

#### **VIII. The Draft RTP And SCS Will Have Disparate Negative Impacts On Protected Classes.**

State law provides that no person shall, on the basis of race, national origin, ethnic group identification, and other protected classes, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state. (Gov. Code § 11135.)

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<sup>11</sup> This statement is identical to the “Significance after Mitigation” statement found in the DEIR prepared by the Merced County Association of Governments (MCAG) for its draft RTP. It appears that, rather than conduct a separate environmental analysis based on its own RTP and unique planning environment, MCTC has borrowed heavily from MCAG’s analysis. Further evidence for this conclusion is found on page 1-15 of the MCTC’s DEIR, where the drafter(s) failed to replace “MCAG” with “MCTC” for mitigation of impacts to prime farmland in Madera County.

In addition, California's Fair Employment and Housing Act, California Government Code 12900, et seq. guarantees all Californians the right to hold and enjoy housing without discrimination based on race, color or national origin. (*See also* Gov. Code § 65008 [Any discriminatory action taken “pursuant to this title by any city, county, city and county, or other local governmental agency in this state is null and void if it denies to any individual or group of individuals the enjoyment of residence, land ownership, tenancy, or any other land use in this state...”]; Government Code §§ 12955, subd. (l) [unlawful to discriminate through public or private land use practices, decisions or authorizations].)

Similarly, Title VI prohibits recipients of federal funds (like MCTC) from taking actions that have the effect of discriminating on the basis of race. (*See* 42 U.S.C. § 2000d.)

Discrimination under these authorities may be shown by a “disparate impact,” meaning that an act which is not expressly discriminatory may still be unlawful if it harms a protected class more than other classes of people. A prima facie case of disparate impact under Section 11135 and Title VI is established by showing: (1) the occurrence of certain outwardly neutral practices; and (2) a significantly adverse or disproportionate impact on minorities produced by the defendant's facially neutral acts or practices.” (*Darensburg v. Metro. Transp. Comm'n* (N.D.Cal. 2009) 611 F.Supp.2d 994, 1042.) A showing of “discriminatory intent” is not required. (*Id.*)

The RTP/SCS here provides for a transportation system that does not serve the needs of protected classes within Madera County. The vast majority of transportation expenditures within the RTP are allocated to capacity increasing road projects, which will primarily benefit commuter traffic on CA-99 and the new developments on CA-41. (DRTP 1-18 [showing 62% of expenditures allocated to capacity increasing projects compared to 17% for transit and 6% for active transportation].) These investments will not address the needs of disadvantaged communities, communities of color or low-income communities within Madera County, and are likely to increase air quality impacts already disproportionately borne by protected classes.<sup>12</sup>

To bring the RTP/SCS into compliance with state and federal antidiscrimination laws, MCTC must revise the RTP/SCS to provide equitable benefits to communities of color, to invest more meaningfully in active transportation infrastructure and transit services within disadvantaged communities, and avoid the impacts to air quality, water quality and other environmental resources that are associated with the present draft.

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<sup>12</sup> *See* Handy, Susan (2015), Increasing Highway Capacity Unlikely to Relieve Traffic Congestion. [http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST\\_Brief\\_InducedTravel\\_CS6\\_v3.pdf](http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf) [“A capacity expansion of 10% is likely to increase VMT by 3% to 6% in the short-run and 6% to 10% in the long-run.”]; *see also* Vedanthm, Ram, et al. (2012), Combining Continuous Near-Road Monitoring and Inverse Modeling to Isolate The Effect of Highway Expansion on a School in Las Vegas; Font, Anna, et al. (2014) Degradation in Urban Air Quality from Construction Activity and Increased Traffic Arising from a Road Widening Scheme; Brown, Steven, et al. (2014) Changes in Air Quality at Near-Roadway Schools After a Major Freeway Expansion in Las Vegas, Nevada.

Mr. Stone  
July 24, 2018  
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\* \* \* \* \*

We look forward to discussing these issues with the MCTC Policy Board and staff, and hope to reach a mutually agreeable resolution that protects the interests of residents of disadvantaged communities within Madera County.

If you have any questions, please contact Leslie Martinez at (559) 369-2790.

Sincerely,

A handwritten signature in black ink, appearing to read 'Leslie Martinez', with a stylized flourish at the end.

Leslie Martinez  
Policy Advocate  
Leadership Counsel for Justice and Accountability

Angela Islas  
Community Health Worker  
Central California Asthma Coalition

Maria Rubio  
Lideres Campesinas

La Vina Community Residents

Fairmead Community Residents

## **APPENDIX 1**



October 19, 2017

Dylan Stone  
Madera County Transportation Commission  
2001 Howard Road  
Madera, CA 93367

**Re: Comments on MCTC 2018 Draft RTP Policy Element**

Dear Mr. Stone:

Thank you for the opportunity to provide feedback on the Draft 2018 RTP Policy Element. Through our comments, Leadership Counsel for Justice and Accountability seeks to ensure that the RTP is guided by policies that create sustainable, equitable and effective transportation and land use options that directly benefit all of Madera County's residents, regardless of race, socioeconomic status, language, or place. Additionally, we would like to see a robust, meaningful public process to shape the RTP and SCS scenarios.

Our comments here are informed and motivated by our work directly with low-income communities and communities of color in Madera County. We work to ensure our partner communities receive the benefits of equitable investment and development so that they can enjoy healthy and safe places to live. This perspective shapes how we approach regional transportation planning, since many communities we work with do not have adequate access to transportation infrastructure such as safe roads, sidewalks or critical public transit alternatives. Therefore, our policy advocacy work on these issues seeks to direct funds, development, and services to these areas that have historically not received their fair share of these benefits.

Low-income communities, disadvantaged communities, and communities of color, particularly in unincorporated areas, could make enormous strides in health and safety if MCTC were to prioritize projects and scenarios that benefit them. Families living in these communities are often not able to walk between houses, to bus stops, schools or stores safely because of lack of active transportation infrastructure and either inefficient public transit options, or no transit options at all. Increased transportation investment in these communities would mean the ability to walk, drive and bike safely within these areas, safe places to exercise, and increased access to medical facilities and services in urban centers. Additionally, investing in public transit and environmentally friendly transportation infrastructure in these communities would decrease harmful emissions within these environmentally vulnerable communities and include these communities in regional solutions to reduce greenhouse gas emissions and fight climate change.

The public outreach component of the RTP/SCS is critical to creating a holistic and consistent document that fully encompasses the needs of all Madera County residents. MCTC must ensure that the public has an opportunity to comment and guide this document to fit the unique needs of the county. It should be MCTC's top priority to meaningfully engage as many people from all parts of the county as possible, and to use their input to construct the 2018 RTP/SCS. MCTC should ensure that community residents have the opportunity to deliberate together and achieve consensus on their most pressing needs and recommendations.

We commend the staff at MCTC for their diligent work on the DRAFT 2018 RTP/SCS and look forward to working with MCTC and other stakeholders on the evolution of the RTP and supporting documents.

Our recommendations for revision to the Policy Element portion of the Draft 2018 RTP are as follows.

**1. Include Community Input In The Development Of The Policy Element**

MCTC has created a list of principles, goals, and objectives within the Draft 2018 RTP Policy Element. As drafted, there is no mention of where this list originated from and by whom it was drafted, though it is our understanding that it has not been substantively updated since 2001. It is crucial for the 2018 Policy Element to be aligned with community identified transportation priorities and ideas. It is also important that the Policy Element reflect the many changes to the legal landscape that have taken place since 2001. We believe that MCTC should use the extensive outreach plan already designed to gather community input on the vision, principles, goals, and objectives and make changes according to that public input.

To ensure substantial and meaningful public input, we recommend that the following policies be included in the 2018 RTP:

- Host at least two meetings with community residents who benefit from a transportation project in Madera County to solicit input on project design
  - Host these meetings at times accessible for all residents, given their work and family schedules
  - Host meetings within the benefited community in venues that are accessible for all residents, given the location of their homes, connection to public transit, and physical disabilities.
  - At these meetings, provide food, child care, and effective interpretation services



- An additional two meetings should be held once the draft plan is completed but prior to final approval.
- Gather information regarding concerns with implementation or construction plans and what safeguards are needed to ensure least disruption to residents lives.
- Gain resident support for the plan, discuss next steps and timeline.
- Ensure implementation of residents' input as the primary force shaping project design and implementation.
- Include representatives of disadvantaged communities on advisory committees and in decision-making spaces whenever possible.

2. **Further Highlight The Importance Of Equitable Transportation Investment In The “Goals” Section**

MCTC should use the regional transportation plan as a mechanism for increasing health and vitality of all its residents. In order to do this, MCTC must clearly lay out the first goal as addressing the needs of its residents followed by growth and development of the region. As currently drafted, there is no mention of meaningful public participation. The seventh goal, should include an explicit reference to public participation and a modification of the first goal to show a focus on residents' needs rather than prioritization of commercial interest.

Further, in addition to prioritization of meaningful public participation, the Policy Element should expressly recognize the importance of supporting transportation equity. The concept of transportation equity may be stated as follows:

**Ensure equitable access to effective transportation options for all, regardless of race, income, national origin, age, location, physical ability, or any other factor with a focus on benefitting the regions most vulnerable populations.**

Support for the inclusion of transportation equity in the Policy Element is found directly in the text of SB 375, which states that the policy element may include “[m]easures of equity and accessibility, including, but not limited to, percentage of the population served by frequent and reliable public transit, with a breakdown by income bracket, and percentage of all jobs accessible

by frequent and reliable public transit service, with a breakdown by income bracket.”<sup>1</sup> (Government Code § 65080(b)(1)(E).)

Along the same lines, Title VI prohibits discrimination in transportation expenditures on the “ground of race, color, or national origin...” (42 U.S.C. § 2000d.) This provision does not merely prohibit policies and practices that are committed with discriminatory intent — Title VI also prohibits “neutral policies or practices” that have a “disparate impact.” (FTA Circular 2012, p. 2.) This means that an action may be discriminatory even if there is no intent to discriminate when the benefits or harms of the action are distributed unequally.

In order to implement the spirit of SB 375 and Title VI, MCTC should ensure that transportation equity is included as a goal in the Policy Element, and that SCS scenario development involves meaningful and substantive public input.

### **3. Enhance The Importance Of Transportation Equity, Public Health, Natural Resource Protection and Smart Growth In The “Principles of Success” Section**

The Principles of Success section is created to guide MCTC to improve the quality of life of Maderans, through “integrated multimodal transportation” and “supportive land use footprint.” As drafted, the Principles of Success fail to explicitly prioritize social and environmental factors that are necessary for the RTP/SCS to advance through the full range of its desired policies and programs.

In order to ensure that the policy element fully encompasses the needs of the region, MCTC should do the following.

- Include Transportation equity
- Access to medical services, fresh foods and vegetables, and local parks
- Prioritization plans, programs and policies that incentivize smart growth and investment in existing communities rather than aid sprawl in the region
- Separate “Health and Environment” into two separate goals to adequately address Public Health priorities and Environmental priorities as following:
  - Goal 1: Public Health - MCTC plans, programs, and policies will ensure that the health of its citizens will be prioritized.

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<sup>1</sup> While we acknowledge that this provision is included with respect to jurisdictions with more than 200,000 residents, it nevertheless evidences an intent by the legislature that jurisdictions consider equity in RTP/SCS development. The failure to include quantification of equity for smaller jurisdictions is likely an acknowledgment that tools to model equity may be a financial burden for those jurisdictions. The population restriction in § 65080 does not, however, weigh against including transportation equity as a goal of the RTP/SCS.

- Goal 2: Environment - MCTC plans, programs and policies, will protect the region's habitat, agricultural land and other natural resources for future and current generations.

**4. Include As A Goal Regarding Encouraging Local Jurisdictions In Madera County To Provide Incentives For Transit And Active Transportation Projects.**

We note the ambitious goals that the California Department of Transportation (Caltrans) has set for shifting how Californians travel. Recognizing that alternatives to driving are urgently needed — for the wellbeing of those who cannot drive, such as youth and the elderly; for those who cannot afford vehicles; and to achieve state air quality and climate goals — Caltrans' Strategic Management Plan 2015-2020 calls for reducing per capita VMT by 15% statewide by 2020, compared to 2010, for tripling biking and for doubling walking and transit mode shares by 2020 compared to the 2010-12 California Household Travel survey. Caltrans recommends that to reach state goals, transportation agencies need to encourage mode shift, i.e., take steps to transform transit and active transportation into viable alternatives to single occupancy vehicle use. Therefore we would suggest adding the following to this policy under the Goals section:

**Encourage local jurisdictions to provide incentives to promote public transit, walking and bicycling, and ridesharing, including as viable and convenient alternatives to driving.**

**5. Include A Policy That Focuses On “First Mile/Last Mile” Solutions.**

We applaud the goal to develop an “integrated multimodal transportation system which facilitates the movement of people and goods.” We would encourage a policy that focuses attention on “first mile/ last mile” solutions. For example, someone might commute from Fresno to Madera via amtrak, but must then travel to their job or meeting location. Solutions for this “last mile” might include bikeshare, carshare, enhanced taxi service. Employer-run shuttle, or other alternatives.

This policy might read: “Conduct a study that identifies first-mile last mile linkages near transit stops throughout the county. Work with local jurisdictions to identify solutions and prioritize these for funding, with a priority on high-volume transit and on transit that serves disadvantaged communities or communities of color.”

6. **Include A Policy That Will Mitigate Loss Of Farmland, Groundwater Recharge Areas, And Other Natural And Working Lands With Regards To Transportation Projects.**

We recommend including the following goals in the 2018 Policy Element:

- **Minimize the loss of natural lands, working lands, and groundwater recharge areas, related to construction of transportation projects sustainable communities strategy development scenarios.**
- **Coordinate Transportation And Sustainable Communities Strategy Planning With Groundwater Sustainability Planning.**

We recognize the SB 375 is focused primarily on improving land use patterns and improving transportation planning in order to reduce greenhouse gas emissions. (SB 375 (2009) § 1(c).) However, groundwater sustainability and quality factor in for at least two reasons. First, MCTC must provide the public with “[w]orkshops throughout the region to provide the public with the information and tools necessary to provide a clear understanding of the issues and policy choices.” (Government Code 65080 § (b)(2)(F)(iii).) Whether and to what extent a specific development scenario in conjunction with a proposed transportation network will have impacts on groundwater sustainability and quality is a relevant issue and policy choice. Without that data, the public will be making a decision between scenarios without all information “necessary to provide a clear understanding of the issues and policy choices.”

Second, MCTC must develop the RTP/SCS “with due consideration of other related planning activities within the metropolitan area.” (23 C.F.R. 450.316.)<sup>2</sup> The SCS must set forth development scenarios, and these scenarios will have an impact on groundwater use and recharge. For example, a development scenario that reduces agricultural and natural lands in Madera County will reduce recharge to already severely overdrafted basins. The same is true of construction of transportation projects such as road expansion, which will reduce permeable soil. As development scenarios will impact groundwater recharge, and thus groundwater sustainability and quality, GSP drafting under the Sustainable Groundwater Management Act is a “related planning activity.”

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<sup>2</sup> In developing an SCS, a MPO must meet the requirements of Part 450 of Title 23 of the Code of Federal Regulations. (Government Code 65080(b)(2)(B).)



As a result, MCTC must — at a minimum — provide the public with enough groundwater information to make an informed choice between SCS scenarios, and give due consideration to SGMA planning processes. The suggested goals referenced above are consistent with both of these requirements.

7. **Adopt A Ten-Year Target And Identify Near-Term Investment To Contribute To Caltrans’ Statewide Goal Of Tripling Biking And Doubling Walking By 2020.**

As noted above, Caltrans has set a statewide goal of tripling biking and doubling walking mode shares by 2020 as compared to 2010-2012. We encourage MCTC to adopt the same ten-year target and then identify near-term investment that would achieve this. Given the relatively low rates of walking and biking, and plans for infill investment in a number of communities, this target is likely well within reach.

8. **Promote Integrated Land Use, Water Resource And Transportation Planning Within the SB 375 goal.**

We recognize that MCTC does not have land use authority in the county and cannot achieve this goal on its own. We encourage MCTC to communicate with its partnering agencies and advocate that they work together towards sustainable regional growth. We believe that the best way to achieve sustainable regional growth is by investing in existing communities and educating county agencies on how this investment could benefit residents. We suggest that MCTC adopt a policy to commit to offer technical assistance to member jurisdictions to actively seek and apply for funds.

We also note that, though MCTC cannot directly control land use in Madera County, it does have substantial control over how development proceeds given that development depends on transportation infrastructure. Further, while MCTC must “consider local general plans,” there is no requirement that the SCS must be entirely consistent with general or specific plans. (Government Code 65080(b)(2)(B).)

9. **Additional Policies To Be Included In The Policy Element**

We recommend that the following additional policies be added to the Policy Element:

- Ensure planning for projects that benefit disadvantaged communities and vulnerable groups is transparent and actively engages affected communities.
- Prioritize projects that benefit disadvantaged communities through project evaluation criteria, scoring criteria, and other decision-making processes.

- Set aside 30% of transportation funds for disadvantaged communities in response to historic disinvestment.
- Direct a percentage of planning funds towards planning for projects in disadvantaged communities through, e.g., the Healthy and Livable Communities Grant program.
- Provide technical assistance and grant writing to disadvantaged communities to develop competitive applications for ATP and other funding.
- Identify transportation needs in disadvantaged communities through meaningful engagement in decision-making about project design and project implementation.
- Develop innovative solutions to suit needs of disadvantaged communities and vulnerable groups, for example ride-share or van pool programs.
- Align scoring criteria to support investment in transportation infrastructure in disadvantaged communities and for vulnerable groups.
- Enhance all residents' access to areas of opportunity (jobs, education, etc), healthy food, clinics and hospitals, regardless of race, income, national origin, age, location, physical ability, or any other factor.
- Create or enhance areas where residents can safely exercise and move around their community.
- Connect residents to activity centers like green spaces and community centers.
- Enhance access to affordable housing options connected to transit.
- Ensure healthy and safe routes for children to schools and between activity centers.
- Ensure accessible and effective transportation options for seniors and persons with physical disabilities.
- Align of projects with County and city housing elements.
- Mitigate environmental impacts of projects.

**10. Ensure That The Multi-Modal Project Evaluation Criteria Will Not Hinder DAC's From Receiving Funds For Projects.**

We thank MCTC for their work on the evaluation criteria, but suggest the following revisions for bicycle and pedestrian projects:

- Section 2 should award points if there are planned projects, as many DAC's in Madera County have no existing bike/ped networks. As drafted, communities without existing networks start at a disadvantage.
- Section 7 should award points only if projects are "directly" benefiting communities with high health priority index scores. An indirect benefit should not result in additional points.
- Section 7 should award a maximum of 3 points based on the health priority index. This will allow disadvantaged and health-impacted communities to better compete for



investment, despite disadvantages such as lack of active transportation networks, activity centers and/or planning in those communities.

- Include a section that offers points for existing communities that have had no meaningful investment in x amount of years. We must ensure that MCTC is committed to improving the lives of the most disadvantaged areas.

\* \* \* \* \*

We welcome any questions you have concerning our recommendations, and look forward to working with MCTC staff to refine the Policy Element for the 2018 RTP.

Sincerely,

Leslie Martinez  
Policy Advocate

Cc: Sandy Ebersole



April 18, 2018

Madera County Transportation Commission Policy Board  
2001 Howard Road, Suite 201  
Madera, California 93637

**Re: 2018 RTP/SCS Preferred Scenario Selection**

Dear Commissioners,

First, we would like to thank the staff at Madera County Transportation Commission, for allowing our organization be a part of the Regional Transportation Plan Advisory committee. We are pleased to serve on the committee and help guide the RTP process.

Leadership Counsel for Justice and Accountability works with the most disadvantaged communities throughout the Central Valley to advocate for sound environmental justice and environmental policies. With respect to the Madera 2018 RTP/SCS, our main goal is to ensure that there be equitable transportation policies and housing development, job growth and a meaningful public process.

Government Code § 65080 (b)(2)(F)(iii) states that “Workshops throughout the region to provide the public with the information and tools necessary to provide a clear understanding of the issues and policy choices.” As of today, there has been two round of workshops held in the various communities of Madera County centered around receiving community feedback on the development scenarios. During the last round, staff presented incomplete scenarios with no GHG reduction targets, no information on housing types amongst many other factors that shape the way residents understand scenarios. Additionally, during the open house on April 12th, no scenarios were available in Spanish. Furthermore, there was no formal vote on what the community preferred scenarios is, and we feel that the Policy Board can not make an informed decision without having a constituent consensus on what scenario they prefer. As of now, MCTC should conduct another round of workshops, they are usually a week long, and still remain on schedule to adopt in the summer of 2018.

We ask that the board delay their decision to vote on the preferred scenario until there is a community preferred scenario.

If any question arise, please call Leslie Martinez at 559-369-2790.

Thank you,

Leslie Martinez  
Policy Advocate  
Leadership Counsel for Justice and Accountability



September 19, 2018

Michael K. Claiborne, Attorney  
Leadership Counsel for Justice and Accountability  
764 P Street, Suite 012  
Fresno, CA 93721

Dylan Stone, Regional Planning Supervisor  
Madera County Transportation Commission

RE: Response to Comments on the Draft Conformity Analysis corresponding to the 2019 FTIP and 2018 RTP/SCS

Dear Mr. Claiborne,

MCTC appreciates and thanks you for your thorough comments on the Draft Conformity Analysis corresponding to the 2019 FTIP and 2018 RTP/SCS. In response to your comments:

**Comment 1 (page 2):** *(a) the RTP/SCS contains policies and funds projects in such a way that development in new communities is prioritized over development in existing communities, thereby increasing vehicle miles traveled and associated air quality impacts (Ex. A, pp. 11-12); (b) the RTP/SCS prioritizes road expansion while failing to acknowledge that road expansion is likely to increase rather than reduce VMTs (Ex. A, pp. 12-13); (c) the RTP/SCS dramatically underestimates the number of workers per household in the Southeast Growth Area and resulting air quality impacts from commuter VMTs (Ex. A, p. 15.); (d) the RTP/SCS underfunds active transportation and transit infrastructure and services (Ex. A, pp. 16-17); and (e) the RTP/SCS and supporting DEIR fail to properly acknowledge air quality impacts associated with construction and operation of road expansion projects (Ex. A, p. 22.)*

**Response 1:** Contained within the posted Final PEIR for the Madera County 2018 RTP/SCS are responses to ‘(a) ... Ex. A, pp. 11-12’ (see response 4.9, p. 2-85), ‘(b)... Ex. A, pp. 12-13’ (see response 4.10, p. 2-86), ‘(c)... Ex. A p. 15’ (see response 4-12, p. 2-88), ‘(d)... Ex. A, pp. 16-17’ (see response 4.13, p. 2-95) and ‘(e)... Ex. A, p. 22’ (see response 4-21, p. 2-100).

**Comment 2 (page 2):** *“Additionally, the Conformity Analysis does not demonstrate that it conforms with the “purpose of eliminating or reducing the severity and number of violations...and achieving expeditious attainment of such standards” as required by § 7506(c)(1)(A). MCTC does not discuss this as a separate requirement in its Analysis, though it stands apart from the requirements of subsection (B) quoted above, and does not contain a discussion of whether the RTP aids in attaining attainment as “expeditiously as practicable.”*

**Response 2:** The requirements of the Clean Air Act Section 176(c) cited in the comment above, specifically, “purpose of eliminating or reducing the severity and number of violations...and achieving expeditious attainment of such standards” apply to the State Implementation Plan (SIP). Conformity demonstration requirements are specified in the Transportation Conformity Regulation in 40 CFR 93 and state that:

“The purpose of this subpart is to implement section 176(c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq. ), and the related requirements of 23 U.S.C. 109(j), with respect to the conformity of transportation plans, programs, and projects which are developed, funded, or approved by the United States Department of Transportation (DOT), and by metropolitan planning organizations (MPOs) or other recipients of funds under title 23 U.S.C. or the Federal Transit Laws (49 U.S.C. Chapter 53). This subpart sets forth policy, criteria, and procedures for demonstrating and assuring conformity of such activities to an applicable implementation plan developed pursuant to section 110 and Part D of the CAA.”

By ensuring that MCTC has met the appropriate conformity budget test requirements set forth in 40 CFR 93.109, MCTC has demonstrated that the 2018 RTP will not worsen air quality in the region nor interfere with the timely attainment of related air quality standards. Further, it should be clarified that conformity determination responsibility falls on the Federal Highway Administration (FHWA), while MPOs are required to demonstrate that conformity will be met, through an interagency consultation process, and by conducting appropriate budget tests, as well as ensuring timely implementation of related transportation control measures (TCMs).

As discussed in our Response to Comments dated September 7, 2018, future VMT increases modeled for the 2018 RTP are largely due to socio-economic factors such as economic recovery and population growth, which are outside of MCTC’s control. Further, capacity-increasing projects are subject to project-level hot-spot analysis and regional conformity requirements to ensure that any projected VMT growth does not worsen air quality problems in the region and continues to conform to the purposes of the SIP. It should be noted that capacity-increasing projects do not always lead to increases in VMT and aid in improving traffic flow speeds, which have significant air quality benefits due to lower transportation emission factors at higher flow speeds.

An element of the preferred scenario selected for the RTP/SCS is to see improvements, expansions and enhancements made to existing and future transit system for each of the three transit providers, with a focus on enhanced transit along major corridors within the region including SR 41, SR 99, SR 145, and Avenue 12. These major corridors feed into areas of concentrated employment in Madera County as well as Merced and Fresno Counties.

By reflecting increased density and accessibility to transit along existing and future transit routes and major street/road and highway corridors, there is a greater potential that residents and employees will chose to use transit rather than drive to their destination. The 2018 RTP projects revenues for transit at \$217 million dollars representing 17% of total expenditures. Transit actions detailed in the RTP (Chapter 5-33) are designed to improve service and accessibility.

**Comment 3 (page 3):** *The Conformity Analysis must also “discuss how transit operating policies (including fares and service levels) and assumed transit ridership have changed since the previous conformity determination” and “reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.” (40 C.F.R. 93.110(c), (d).) While the Analysis does discuss transit operating policies, the discussion is not complete and notably contains no discussion of changes in fares or service levels since the previous conformity determination (if any).*

**Response 3:** Comment acknowledged. We have amended Draft Conformity Analysis for the 2018 RTP and 2019 FTIP to include the following language:

*“MCTC’s transit fares have remained static since the last conformity determination adopted on September 21, 2016 or as amended on October 10, 2017. The MCTC travel model does not have a transit network to assign transit trips to making the model insensitive to transit ridership changes. For the purpose of conformity demonstration, no changes to transit ridership levels are noted.”*

**Comment 3 (page 3):** *“Federal regulations require that “[k]ey assumptions shall be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by §93.105.” (40 C.F.R. § 93.110(f).)”*

**Response 3:** All latest planning assumptions are documented in Chapter 2 of the Draft Conformity Analysis (see Table 2-1).

**Comment 4 (page 4):** *“However, the Conformity Analysis states only that the 2007 and 2016 Ozone Plans do not “include new TCMs for the San Joaquin Valley.” This brief statement does not support the conclusion that the RTP plans implement all TCMs or that nothing in the RTP interferes with the implementation of any TCM...Further, applicable regulation requires that “[t]he conformity determination must use the latest existing information regarding the effectiveness of the TCMs and other implementation plan measures which have already been implemented.” (40 C.F.R. § 93.110(e).)*

**Response 4:** The TCM requirements are included and discussed in Chapter 4 of the Conformity Analysis. The 2016 Ozone Plan, which has not yet been approved by EPA and is currently undergoing changes, references the 2002 Ozone Plan TCMs that are discussed on page 42-43 of the conformity document. Appendix D to the Draft Conformity Analysis includes Timely Implementation Documentation (TID) of all the TCMs referenced in the 2002 and 2016 Ozone Plans demonstrating that the 2018 RTP does not interfere with implementation of TCMs in all of the applicable SIPs. In addition, the SJV MPOs have voluntarily adopted a CMAQ Policy in 2007, which requires distributing at least 20 percent of the CMAQ funds to projects that meet the cost-effectiveness threshold for emission reductions. The local TCMs are currently being implemented by MCTC as part of the CMAQ Policy, which focuses on achieving the most cost-effective emissions reduction, while maintaining flexibility to meet local needs.

For the purpose of providing more information regarding TCM projects relative to the time between our previous conformity demonstration, Table 4-1 has been added to Chapter 4 of the document. See below:

Table 4-1

TCM Projects Completed Since Last FTIP (2017 FTIP)				
<b>TCM1 - Traffic Flow Improvements</b>				
Project Description			Estimated Cost	Exemption Code (per CTIPs*)
Road 406	Road 400 to 2.5 miles east	Pave dirt roads	\$478,000	1.03
Road 36 and Avenue 12 1/2	Road 36 and Avenue 12 1/2	Install Traffic Signal	\$263,000	5.02
Northbound Road 28	Intersection of Road 28 and Avenue 14 1/2	Left Turn Lane	\$564,000	1.07
North Fork	Road 274 and Road 225	Construct Roundabout	\$490,000	1.07
Madera	Various Locations	Alley Paving	\$185,000	1.1
Madera	Various Locations (No. 2)	Alley Paving	\$815,000	1.1
<b>TCM3 - Bicycle/Pedestrian Program</b>				
Project Description			Estimated Cost	Exemption Code (per CTIPs)
Gateway, Central, 3rd, E Streets	Various Locations Bounded by Gateway, Central, 3rd, E St	Construct Pedestrian Facilities	\$315,000	3.02
Schools (City of Madera)	Sidewalk Construction around Schools and Commercial Areas	Construct Bike/Ped Facilities	\$266,000	3.02

\* See CTIPS Exemption Table, Appendix B

**Comment 5 (page 4):** “Similarly, it appears that the VMT modeling is done using data from 2007 through 2010. (See Conformity Analysis pp. 24-25.) If this is correct, EPA/DOT guidance require that MCTC include a “written justification” of why more recent data was not used. (Conformity Analysis, Appx. A.) The Conformity Analysis does not contain such an explanation.”

**Response 5:** Draft Conformity Analysis was amended to include such an explanation:

“MCTC does plan to update its traffic modeling and forecasting tools in 2018/2019 and 2019/2020 fiscal years. This update will include new traffic calibration utilizing more recent data related to observed traffic behavior. Recourses are allocated towards this effort and this update has been planned for in the MCTC Overall Work Program.”

In addition, the MCTC travel demand model meets the federal requirements in 40 CFR 93.122(b)(1)(i) that state:

“Network-based travel models must be validated against observed counts (peak and off-peak, if possible) for a base year that is not more than 10 years prior to the date of the conformity determination. Model forecasts must be analyzed for reasonableness and compared to historical trends and other factors, and the results must be documented.”

By using 2010 validation base year for their travel model, MCTC is in compliance with procedures for determining regional transportation-related emissions. Table 2-1 of the Draft Conformity Analysis provides additional information on when the next model update shall occur.

For areas with network-based travel models, a factor (or factors) may be developed to reconcile and calibrate the network-based travel model estimates of VMT in the base year of its validation to the HPMS estimates for the same period. These factors may then be applied to model estimates of future VMT.

**Comments 6 (page 5-6):** *“conformity determinations on transportation plans , programs, and projects shall establish a **proactive public involvement process** which provides opportunity for public review and comment by, at a minimum , providing reasonable public access to technical and policy information considered by the agency at the beginning of the public comment period.”*

**Response 6:** The Draft Conformity Analysis was released for public review on June 21, 2018 and then again on August 16, 2018 to incorporate minor change, for 30 days consistent with the MCTC Public Participation Plan as required by Transportation Planning requirements in 23 CFR 450.316(a). The agency disagrees with commenter’s suggestions that the public process was not “proactive”. The document was available for public review for 60 days and all comments have been addressed or incorporated into the Draft Conformity Analysis.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dylan Stone', with a stylized, cursive script.

Dylan Stone, Regional Planning Supervisor

Patricia Taylor, Executive Director  
Madera County Transportation Commission